

ABLE MARINE ENERGY PARK (MATERIAL CHANGE 2)

PRELIMINARY ENVIRONMENTAL INFORMATION REPORT

VOLUME 3: NON-TECHNICAL SUMMARY

Able Marine Energy Park, Killingholme, North Lincolnshire



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1.0 Introduction

- 1.1 This Non-Technical Summary (NTS) has been prepared by SLR Consulting Limited (SLR) on behalf of Able UK Limited ('The Applicant') and it outlines the content of the Preliminary Environmental Report (PEIR) undertaken for the proposed material amendment at Able Marine Energy Park (AMEP) in Killingholme, North Lincolnshire. The PEIR is necessitated by the proposals for a material amendment (also referred to as 'material change 2') to the consented DCO proposals.
- 1.2 The DCO for the Able Marine Energy Park (AMEP) was made on 13th January 2014, laid before Parliament on 10th February 2014 and subsequently came into force on 29th October 2014 (Statutory Instrument 2014 No. 2935).
- 1.3 The DCO permits, *inter alia*, the development of a new quay and associated development at Killingholme in North Lincolnshire, on the south bank of the Humber Estuary. Briefly, the development on the south bank comprises a quay, reclaimed estuarine habitat and the provision of onshore facilities for the manufacture, assembly and storage of components relating to the offshore renewable energy sector. The DCO further permits other associated development comprising environmental habitat on the north bank of the Humber in the East Riding of Yorkshire authoritative area.
- 1.4 The application for the DCO was made in December 2011 and was supported by an Environmental Statement (ES). The documents forming the ES are listed at Schedule 11, paragraph 1 of the AMEP DCO, and this complete set of documents is referred to in the PEIR and this NTS as 'the original ES'.
- 1.5 This NTS seeks to provide a summary of the proposed material change and its likely effects on the environment in non-technical language.

Non-Technical Summary

- 1.6 Schedule 4 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ('the EIA Regulations') sets out the information to be included within an ES. In summary, the information requirements include, but are not limited to, the following:
- A description of the development, including a description of the location of the development, including physical characteristics, operation phase information, and expected residues and emissions;
 - A description of the reasonable alternatives studied by the developer which are relevant to the proposed project;
 - A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the development (future scenario);
 - A description of the factors likely to be significantly affected by the development;
 - A description of the likely significant effects of the development on the environment;
 - A description of the forecasting methods or evidence used to identify and assess the significant effects on the environment;

- A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements;
- A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned;
- **A non-technical summary of the information listed above;** and
- A reference list detailing the sources used for the descriptions and assessments included in the ES.

1.7 This document therefore comprises a Non-Technical Summary as required by Schedule 4, Paragraph 9 of the EIA Regulations. However, whilst the EIA requirements have been used as a guide for the PEIR, for the avoidance of doubt, the PEIR is purely a consultation document and not an ES or a draft ES.

Scoping Opinion

1.8 In accordance with Regulation 10(2) and 10(4) of the EIA Regulations, a person who proposes to make a subsequent application may ask the relevant authority (the Secretary of State in this instance) to state in writing its opinion *“as to the scope, and level of detail of the further information to be provided in the updated environmental statement”*.

1.9 In this regard, an EIA Scoping Report was prepared by Fairhurst on behalf of Able Humber Ports Limited (‘the Applicant’) and submitted to the Planning Inspectorate (PINS) in January 2021 (report ref. 138434/504). The EIA Scoping Report was supported by a range of drawings describing the current baseline and the proposed material amendment.

1.10 A formal Scoping Opinion was adopted by PINS on behalf the Secretary of State in March 2021 (PINS Case Reference TR030006).

1.11 Further information relating to the formal Scoping exercise, the content of the formal Scoping Opinion and other consultation undertaken in support of the development is contained within Chapter 5: Scoping and Consultation. This includes a copy of the Scoping Report and Scoping Opinion within Appendices U5-1 and U5-2.

Viewing the PEIR and Representations

Requesting Copies of PEIR Documents

1.12 The DCO and original ES, are available to view (free of charge) via the National Infrastructure Planning website on the following link: <https://infrastructure.planninginspectorate.gov.uk/>.

1.13 A copy of the PEIR can be requested from Able UK Limited in either electronic (CD) or hard copy. The cost of duplicating the PEIR will be charged at cost (i.e., no additional uplift) dependent on the format that the copy is requested. These costs are detailed below:

- Electronic copy via file share - free of charge;

- Electronic copy via CD - £10 + postage; or
- Hard copy via post - £100.

- 1.14 Unfortunately, given the size of the PEIR, it is not possible to disseminate copies of this document via email.
- 1.15 A copy of the NTS can also be requested in either electronic (email or CD) or hard copy and is available free of charge. If a hard copy is requested, please send an A4 size stamp addressed envelope to the following address: **Able UK Ltd, Able House, Billingham Reach Industrial Estate, Billingham, Teesside TS23 1PX.**
- 1.16 All other requests for copies of the PEIR documents can be made via email at amepmc2@ableuk.com.

Consultation and Representations

- 1.17 In accordance with the Planning Act 2008 and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, the PEIR (and this NTS) will be utilised to undertake the necessary consultation in advance of any Updated ES being submitted as part of the Material Amendment Application.
- 1.18 A list of consultation bodies, groups and persons which must be notified (in writing) that the PEIR (and this NTS) is available to view has been agreed with the Secretary of State for Transport.
- 1.19 Able Humber Ports has written to each of these parties to notify them of the intention to submit a Material Amendment Application and to provide details of this consultation, including details of the PEIR. A website has also been created to allow the PEIR (and this NTS), associated information and drawings for the material amendment consultation to be freely available; the website address is as follows: <https://www.ableuk.com/sites/port-sites/humber-port/amep/>, the documents can be found under the tab "Documents".
- 1.20 In addition to the above, and in accordance with the Planning Act 2008, the intention to submit the Material Amendment Application will be advertised in the local press in advance of the pre-submission consultation process commencing.
- 1.21 Should you wish to make representations to this consultation on the DCO material amendment, including comments on the PEIR, these must be made within 30 days of the start date of consultation: the start date will be advertised and made publicly available. Any such representations can be submitted to Able UK Ltd at the following email or postal address:
- Email: **amepmc2@ableuk.com**
 - Post: **Able UK Ltd, Able House, Billingham Reach Industrial Estate, Billingham, Teesside TS23 1PX.**

2.0 Description of Site and Surroundings

Site Location & Description

- 2.1 The AMEP DCO incorporates three distinct areas, the terrestrial 'AMEP Site' and 'Compensation

Site', as well as a quay within the Humber Estuary which is referenced as the 'Marine Site'. The proposed material amendment only relates to the 'AMEP Site' and the 'Marine Site'. As such, the minor amendments do not relate to, or have an effect upon, the 'Compensation Site'.

2.2 As detailed within Chapter 1, paragraph 1.2.2 to 1.2.4 of the original ES:

"The proposed AMEP site is located east of North Killingholme, within North Lincolnshire, on the south bank of the River Humber. The site is approximately 1km downstream of the Humber Sea Terminal (HST) and immediately upstream of the South Killingholme Oil Jetty.

The site, excluding the area of ecological mitigation, covers approximately 268 ha, of which approximately 122.4 ha is covered by existing consent for port related storage, 100.3 hectares is existing arable land that will be developed for industrial use and 45 ha is reclaimed land from the estuary to provide a new quay. A further 47.8 ha of existing arable land will be converted to managed grassland to mitigate for the effects of the development on ecological receptors including birds that use the adjacent Humber Estuary SPA.

A large proportion of the site's terrestrial area currently comprises hard-standing for the storage of imported cars, particularly in the north-east/east of the site and in the west of the site. A railway line passes through the site, and a redundant sewage works can be found to the south-west of the site. Former clay pits to the north of the site, which are now flooded, are classified as a Site of Special Scientific Interest (SSSI) and are also part of the Natura 2000 network of sites. A raised embankment along the eastern boundary supports a flood defence wall, which protects the site from tidal flooding."

2.3 Since the DCO came into force in October 2014, the applicant has developed the site, in accordance with both the planning permissions extant at the time of the application and in accordance with further planning consents. In some cases, works have been undertaken to progress development in accordance with the DCO and in other cases it was to enable use of the site for purposes other than those permitted by the DCO, namely, car storage.

Figure 1: Aerial Photograph of the AMEP Site - January 2012



Figure 2: Aerial Photograph of the AMEP Site - April 2019



Planning History

- 2.4 Tables 1-1 and 1-2 within Chapter 1 of the PEIR contain the planning permissions obtained for the site. Table 1-1 details the extant planning permissions on the site up until the end of the year 2011, whilst Table 1-2 details the planning permissions on the site, granted after the DCO.
- 2.5 Whilst planning permissions have been granted on the application site since the DCO was submitted, and further development of the site has been undertaken, it is evident that:
- No planning permissions prejudice the delivery of the AMEP scheme; and
 - No planning permissions have any consequential impact on the phasing of construction activities.

3.0 Description of Proposed Development

- 3.1 The details of the proposed 'material change 2' are summarised as follows:
- Changes to the proposed quay layout to reclaim the specialist berth at the southern end of the quay, and to set back the quay line at the northern end of the quay to create a barge berth;
 - The addition of options to the form of construction of the quay whereby the piled relieving slab to the rear of the quay could be raised or omitted entirely (subject to detailed design), and the quay wall piles could be restrained with more conventional steel anchor piles and tie bars in lieu of flap anchors;
 - A change to the approved diversion of footpath FP50 in North Lincolnshire to avoid crossing over the existing rail track at the end of the Killingholme Branch Line;
 - Provision of a third cross dam within the reclamation area to enable greater flexibility for staged

completion, and early handover of sections of the quay;

- A change to the consented deposit location for 1.1M tonnes of clay to be dredged from the berthing pocket, to permit its disposal at HU082 or another approved location if required; and
- An amendment to the sequencing of the quay works (as illustrated on the consented DCO drawings AMEP_P1D_D_101 to 103; Indicative Sequence Plan View[s]) to enable those works to commence at the southern end of the quay and progress northwards.

3.2 It should be noted that the changes to the proposed quay layout would result in a reduction in footprint area reclaimed from the estuary. The DCO quay alignment has a footprint of 45 hectares, whilst the proposed quay alignment within the material amendment would equate to a footprint of 43.6 hectares; a reduction of approximately 1.4 hectares.

3.3 In addition to the above, there are no alterations proposed to the operating life or decommissioning of the site. As such, these elements remain as considered and assessed within the original ES.

3.4 Full details of the proposed material amendment are provided within Chapter 4 of the PEIR: Description of Changes to Development.

Consultation

3.5 A range of additional consultation, in addition to the Scoping exercise outline in Chapter 5 of the PEIR was undertaken with statutory consultees. These additional consultations were undertaken on an ad-hoc basis by the teams responsible for preparing the various technical assessments and chapters of the PEIR.

3.6 Each individual technical chapter of the PEIR has provided details of any additional consultation undertaken and included pertinent correspondence within a supporting Technical Appendix. A brief summary of the consultation undertaken is provided below:

- **Aquatic Ecology** – consultation has been undertaken with the Marine Management Organisation, Environment Agency and Natural England on 25th March 2021;
- **Commercial Fisheries** – consultation has been undertaken with the Environment Agency;
- **Flood Risk and Drainage** – a virtual consultation meeting with officers from the Environment Agency was undertaken on the 25th of March 2021;
- **Commercial and Recreational Navigation** – preliminary consultation was undertaken with stakeholders with regards to commercial and recreational navigation with the ABP Humber;
- **Traffic and Transport** – consultation with North Lincolnshire Council regarding major highways works and effect of material amendment on network;
- **Air Quality** – additional consultation with the NLC Environmental Protection Team undertaken but no response received to date; and
- **Socio-Economic** – additional consultation was undertaken between the developer, AMEP and Network Rail in August 2020.

4.0 Consideration of Alternatives

- 4.1 Whilst the principal consideration of alternatives is contained within the original ES, below is an update to the consideration of alternatives with respect to the proposed material amendment. Given the scope of the material change, these considerations have been separated between ‘terrestrial’ (those which relate to the ‘AMEP Site’) and ‘aquatic/quay’ (those which relate to the ‘Marine Site’) alternatives.

Terrestrial Alternatives

- 4.2 Alternatives that have been considered by the Applicant are fully reported in the original ES which supported the DCO. Given that the scheme benefits from an extant DCO, and elements have been implemented by way of local planning authority level consents, no further consideration of alternative sites has been considered as part of the PEIR.
- 4.3 Furthermore, with regard to alternate design solutions, those are examined within the original ES and represented by the DCO itself. Given that the material change is necessitated to resolve minor elements of the original scheme design which are no longer viable or necessary, there are no further design alternatives which have been considered by the applicant. Again, on this basis, it is not considered necessary to consider alternate design solutions further within the PEIR.

Aquatic / Quay Alternatives

- 4.4 With regard to the layout of the quay, the only real alternatives considered by the Applicant are examined within the original ES and represented by the DCO itself.
- 4.5 The proposed material change is desirable for the AMEP scheme to be implemented at pace and to resolve issues that have emerged subsequent to the DCO coming into force.
- 4.6 On this basis, the changes between the extant DCO and the material change are the only true alternatives considered as part of the PEIR.
- 4.7 Notwithstanding the above, were the material change not to be brought forward/consented, the extant DCO would remain implementable and constitute the ‘fall back’ position upon which Able would rely.

5.0 Description of Committed Developments

- 5.1 In accordance with the EIA regulations, the PEIR has included an assessment of any direct and indirect cumulative effects arising from the inter-relationship between different impacts arising from the site when considered alongside any other developments in the area surrounding the site.
- 5.2 As the changes sought through this Material Change application are limited to changes in the quay design and consequential amendments (with no changes to any terrestrial components of the scheme), the likelihood of cumulative impacts which have not been previously assessed is very limited.
- 5.3 Implementation of terrestrial works within the DCO site itself which have already been undertaken (as detailed in Chapter 1 of the PEIR) are also excluded from the cumulative assessment on the basis that they were consented as part of the DCO, and the Material Change application does not propose

any changes to terrestrial elements of the scheme.

- 5.4 Chapter 6 of the PEIR provides a factual account of the surrounding developments in the local area that form part of the wider cumulative assessment that is reported in Chapter 26 of the PEIR.

6.0 Planning Policy Context

- 6.1 Chapter 3 of the PEIR presents an overview of the changes in planning policy and guidance of relevance to the site since the submission of the original ES.
- 6.2 The terrestrial areas of the site lie within the administrative boundaries of two local authorities, North Lincolnshire Council (NLC) and East Riding of Yorkshire Council (ERYC), and within close proximity to the boundaries of North East Lincolnshire Council (NELC), changes to local planning policy will be considered for all three areas.
- 6.3 The policies within the East Riding of Yorkshire Local Development Framework (LDF) only apply to the compensation site. As stated earlier, the material amendment does not affect the compensation site, however, changes to the planning policy and legislation for this administrative area have still been identified in the PEIR for completeness.
- 6.4 Policies and legislation applicable to the various technical assessments included within the PEIR are contained within the relevant chapters.

7.0 Technical Chapters

Geology, Hydrology and Ground Conditions

- 7.1 Chapter 7 of the PEIR provides a technical review of the Geology, Hydrogeology and Ground Conditions since the original ES and taking account of the proposed material amendment.
- 7.2 The only change from the baseline, effects and mitigation assessed in the original ES (Chapter 7) is related to additional sediment sampling and testing required under Variation 2 of the Deemed Marine Licence in Schedule 8 of the DCO.
- 7.3 Additional testing has identified trace element and TCH levels in excess of the AL1 level; however, all levels either remain below their respective AL2 level, or consistent with background concentrations typical for the River Humber. Based on this no additional mitigation is considered necessary.
- 7.4 Approval for the disposal of dredged sediments in the Humber is still to be provided; however, it is anticipated that this will be provided and no barriers to approval remain.

Hydrodynamic and Sedimentary Regime

- 7.5 Chapter 8 of the PEIR examines the likely changes to the Hydrodynamic and Sedimentary Regime of the Humber Estuary in relation to the AMEP scheme based on the differences between the consented layout and the proposed material amendment. The chapter principally relates to the proposed amended quay layout.
- 7.6 The chapter concluded that changes in water levels, bed shear stresses and waves are similar for

the material change layout and the consented layout. There are small differences in the peak flow patterns on the ebb tide; a localised region of flow acceleration is predicted off the downstream end of the quay. This initial change may diminish with time but should be noted.

- 7.7 For the proposed AMEP Amended Quay layout, mud transport modelling using present-day bathymetry predicts a reduction in maintenance dredging requirements (compared with the updated baseline) at adjacent berths except for a potential increase at South Killingholme Oil Jetty (SKOJ) (35,000 to 88,000 m³/year) and a potential increase (3,000 to 7,000m³ per year) at Immingham Gas Terminal (IGT).
- 7.8 From the sand transport modelling some potential increases of sand deposition compared with baseline are predicted for Humber International Terminal (50,000 to 102,000 m³), C.Ro Port (13,000 to 18,000 m³), Immingham Bulk Terminal (8,000 to 13,000 m³), Immingham Outer Harbour (2,000 to 3,000 m³) with a reduction of 100,000 to 204,000 m³ predicted at SKOJ, and between 18,000 m³ increase or 29,000m³ reduction likely at IGT. The significance of these potential effects on future maintenance dredging at these berths should be assessed alongside evidence of the composition of the material that is presently dredged from the berths. It is understood that the bulk of the material from the berths is muddy. If the berths are not presently subject to significant sandy infill, which is understood to be the case, then the changes due to AMEP in terms of sandy sedimentation in the berths are not predicted to arise.
- 7.9 the change to maintenance dredging requirements at the proposed AMEP Amended Quay layout when compared to the consented scheme is predicted to be an increase of up to 41,000 m³/year muddy sediments and a decrease of 34,000 m³/year for sandy sediments into the AMEP Berth Pockets. Significant localised sand deposition onto the dredged slopes of the proposed turning area / approach channel is predicted.
- 7.10 To the northwest of AMEP, bed level rising is likely to be at a slightly lower rate with the proposed AMEP Amended Quay layout. To the southeast there is likely to be no significant change from that predicted, other than to note that significant accretion has taken place since the original assessment (as a result of HIT) which leads to a reduced accretionary effect attributable to AMEP.
- 7.11 The changes to dredging requirements at the AMEP site and the surrounding facilities are detailed within Table 8-3 of the PEIR.

Water and Sediment Quality

- 7.12 Chapter 9 of the PEIR considers the impact of the proposed material amendment on Water and Sediment Quality.
- 7.13 The proposed material amendment would involve changes to physical works within and immediately adjacent to the estuary. As a result, there is a potential for a change in the effect of the scheme during construction associated primarily with dredging and deposition of estuarine sediment. However, detailed analysis and assessment have however confirmed that these impacts will remain small and are not significant.
- 7.14 The proposed material amendment would also involve a variation to the final quay profile extending out into the estuary. While associated impacts of this on flow patterns and sediment deposition are considered in Chapter 8 of the PIER there is also a potential for changes in mixing and circulation to impact water quality. Detailed analysis and assessment has however confirmed that these impacts will remain small and are not significant.

Aquatic Ecology

- 7.15 Chapter 10 of the PEIR assesses the impacts on the Aquatic Ecology of the Humber Estuary in the vicinity of the proposed development in relation to proposed material amendment to the consented development and is based on the outcomes of the formal Scoping Opinion.
- 7.16 The Scoping Opinion identified the following issues of significance:
- Saltmarsh Communities;
 - Intertidal and Subtidal Invertebrate Communities;
 - Fish Communities;
 - Marine Mammals; and
 - Based on the updated characterisation of the above appropriate baseline conditions, changes to expected potential impacts arising from the material amendment, mitigation measures and residual impacts if and when they occur.
- 7.17 No significant changes have been identified outside of those described in the original ES and the Examining Authorities Report (2013).
- 7.18 Based on an assessment of the potential changes to the aquatic ecology of the area against conditions identified in the original ES baseline, and from the assessment of the material amendment, no significant effects have been identified other than those assessed in the original ES from the DCO.
- 7.19 The mitigation measures provided in the original ES are considered to remain valid.

Ecology and Nature Conservation

- 7.20 Chapter 11 of the PEIR reports on any change in the findings of the original ES in respect of Terrestrial Ecology and Nature Conservation, including ornithology, pursuant either to the proposed material amendment or consequential to any natural changes since the original environmental impact assessment was undertaken.
- 7.21 Where appropriate, new baseline conditions have been characterised and assessed against those described in the original ES. No significant changes have been identified outside of those described in the original ES and considered in the Examining Authorities Report (2013)
- 7.22 There are no changes to the residual effects identified within the original ES and the approved compensatory habitat will remain suitable to offset effects that cannot be mitigated.

Commercial Fisheries

- 7.23 Chapter 12 of the PEIR assesses the potential impact of the material change on commercial fishing and where appropriate, it provides reviewed and revised mitigation measures.
- 7.24 The proposed change in the quay layout leads to:

- alteration to the fish and shellfish assemblage;
- alteration to potential commercial resource exploitation;
- restriction to access of fish and shellfish resources for commercial and recreational fisheries.

7.25 The proposed change to dredge disposal leads to:

- alteration to the fish and shellfish assemblage;
- alteration to potential commercial resource exploitation.

7.26 Chapter 12 concluded that no significant changes or effects were identified outside of those which were described in the original ES.

7.27 The mitigation measures provided in the original ES are considered to remain valid.

Drainage and Flood Risk

7.28 Chapter 13 of the PEIR considers the impact of the proposed material amendment on flood risk and drainage on the site.

7.29 The chapter concluded that although the site is located in an area where flooding is possible, the risk is largely controlled through flood defences. The scheme design has been developed to reflect the prevailing risk and will not exacerbate flood risk elsewhere. Residual risk of flooding will be managed through the implementation of a robust flood warning and evacuation strategy.

7.30 With regards to drainage, storm water runoff from the site will largely be discharged to the Humber Estuary. However, there is a potential for pollution to occur to the adjacent surface water channels and networks during construction. This will be controlled and managed through the implementation of good construction practices.

7.31 The proposed material amendment will make no difference to the potential effects and no additional mitigation will be required.

Commercial and Recreational Navigation

7.32 Chapter 14 of the PEIR considers the impact of the proposed development on commercial navigation.

7.33 Early review of the anticipated effect of the material amendment to the consented AMEP project is anticipated to be low given information available to date. Detailed assessment of individual hazards and stakeholder consultation is required and will be undertaken as part of an updated Navigation Risk Assessment to fully consider the effect of the material change.

Traffic and Transport

7.34 Chapter 15 of the PEIR considers the impact of the proposed material amendment on traffic and transport arising from construction and operation. The chapter undertakes a review of transport related assessments previously undertaken and consider the likely implications of the proposed Material Amendment to determine whether the proposals are compliant with the extant ES/DCO.

- 7.35 The chapter concluded that the proposed material amendment would result in no material change to traffic levels/patterns generated during the construction and operation phases.
- 7.36 Consultation with North Lincolnshire Council and Highways England has confirmed that all major highways works are complete, and they are satisfied the Material Change will not impact on the highway networks.
- 7.37 As such, the original ES remains adequate in its review of the effects of development derived traffic.

Noise and Vibration

- 7.38 Chapter 16 of the PEIR considers the impact of the proposed material amendment on noise and vibration.
- 7.39 The chapter concludes that the proposed material amendment, changes in policy, guidance and baseline conditions that have occurred since the original DCO application, will not alter the findings presented within the original ES.
- 7.40 Therefore, the original ES remains valid and no additional or alternate mitigation is required from a noise and vibration perspective.

Air Quality

- 7.41 Chapter 17 of the PEIR considers the impact of the proposed material amendment on the air quality and compliance with relevant policy and standards.
- 7.42 The PEIR considered the predicted effects of the original ES, and the current and future baseline, in the context of the proposed material amendment and whether the material amendment will materially alter the conclusions in the original Air Quality chapter of the ES. It was concluded that the original ES conclusions, which predicted all effect as 'not significant' remain valid. The material amendment is therefore not considered to result in any new/different effects or effects of a greater magnitude than were previously assessed.

Marine Archaeology

- 7.43 Chapter 18 of the PEIR considers the impact of the proposed material amendment on the Historic Environment. Given the scope of the proposed material amendment, the content of Chapter 18 is limited to the consideration of the marine Historic Environment and there is no need to consider terrestrial Historic Environment beyond that contained within the original ES for the DCO.
- 7.44 The material amendment relating to the footprint of the new quay and the dredging volumes have the potential to impact the marine historic environment, however, these effects are considered negligible as compared to those identified in the original ES.
- 7.45 The risks to the marine Historic Environment can be adequately mitigated through the mitigation measures set out in the 2021 WSI (Wessex Archaeology 2021; Technical Appendix U18-2), with the location of the archaeological watching brief altered to correspond with the updated location of the berthing pocket (Figure 18-1, Technical Appendix U18-1).
- 7.46 The proposed material amendment will make no difference to the potential effects and no additional mitigation will be required to those set out in the 2021 WSI.

Light

- 7.47 Chapter 19 of the PEIR considers the impact of the proposed material amendment on planning policy and the impact of lighting from the development on local receptors.
- 7.48 The DCO baseline is still considered representative of the current baseline situation. Despite new development, including the lighting. The area is still classified as Environmental Zone E4, “high district brightness”.
- 7.49 Effects of the external lighting associated with the proposed development are still considered to be 'not significant'. As such, it is considered that lighting does not represent a material constraint to the development proposals, which conform to the principles of National Planning Policy Framework and Local Policy. On this basis, this topic will be ‘scoped out’ of the updated ES.

Landscape and Visual Impact

- 7.50 Chapter 20 of the PEIR considers the impact of the proposed material amendment identified above on the landscape and visual resource. The chapter identifies significant landscape or visual effects that are predicted as a result of the change to the Project. The chapter doesn’t consider the effects of a marginal or negligible nature where significant effects would not occur.
- 7.51 It is concluded that the proposed material amendment would result in very limited, and not significant, changes to the landscape and visual resource of the study area and to the effects already assessed in Chapter 20 of the original ES for the DCO, therefore, the extant landscape and visual assessment contained within the original ES remains adequate.
- 7.52 As such, as a result of the assessment in the PEIR and the Scoping Opinion, this topic has been ‘scoped out’ of the PEIR.

Socio-Economic

- 7.53 Chapter 21 of the PEIR considers the extent to which the proposed changes affect the findings of the ES and assesses the impact of the proposed material amendment on the baseline situation.
- 7.54 The proposed changes do not affect the assessment of economic effects of the proposed development. Similarly, the proposed changes have no impact on community service provision. Chapter 21, therefore is confined to addressing the following:
- effect of the proposal to amend the authorised diversion route for a Public Rights of Way, Footpath 50 in order to avoid creating a new rail crossing on an active line. Footpath 50 forms part of the proposed route of the England Coast Path in this area.
- 7.55 The chapter concludes that there would be no significant effects as a result of the proposed material change and therefore, the topic has been ‘scoped out’ of the PEIR.

Aviation

- 7.56 Chapter 22 of the PEIR considers the impact of the proposed material amendment on aviation.
- 7.57 The chapter concluded that with the exception of the potential alteration to quay crane heights at

the site, no significant changes have been proposed in relation to key building heights and other structure elements (including lighting poles) relevant to the assessment of aviation safeguarding and marking/lighting of obstacles.

7.58 Therefore, the material amendment and the associated changes to the proposed design will not therefore give rise to any new or different impacts on aviation safeguarding.

Waste

7.59 Chapter 23 of the PEIR considers the impact of the proposed material amendment on terrestrial wastes arising from construction and operation.

7.60 The proposed material amendment would result in minimal change to the waste arisings estimated and the effects considered in the waste chapter of the original ES for the DCO. Therefore, the original ES is considered to remain adequate in its review of the effects of terrestrial waste.

Health

7.61 Chapter 24 considers the extent to which the proposed changes affect the findings of the ES and assesses the impact of the proposed material amendment on the baseline situation, with regards to health.

7.62 The proposed changes do not affect the findings of the original ES which concluded that there would be no significant adverse health effects arising from the proposed development other than an increased risk of injury from road traffic accidents.

7.63 There would also be no change to the findings of the original ES with regard to beneficial effects due to the impact on health and wellbeing from employment creation.

7.64 The original ES remains valid, and no additional or alternate mitigation and monitoring is required.

8.0 Mitigation and Monitoring

8.1 This section outlines any mitigation measures that have been incorporated into the proposed material change in response to the identified effects. Further details on the mitigation and monitoring are included in Chapter 27 of the PEIR.

8.2 No additional or alternate mitigation is required outside of that which is contained within the original ES for the following technical topics:

- Geology, Hydrogeology and Ground Conditions;
- Hydrodynamics and Sediment Quality;
- Water and Sediment Quality;
- Aquatic Ecology;
- Ecology and Nature Conservation;

- Commercial Fisheries;
- Drainage and Flood Risk;
- Transport;
- Noise and Vibration;
- Air Quality;
- Light;
- Landscape and Visual;
- Socio-Economics;
- Waste; and
- Health.

8.3 With regard to Commercial and Recreational Navigation, the requirement for any additional mitigation beyond that outlined within the original ES in addition to a review of the appropriateness of the DCO mitigations with respect to commercial and recreational navigation will be undertaken as part of the NRA process informed by stakeholder consultation.

8.4 With regard to Marine Archaeology, the risks to the marine Historic Environment can be adequately mitigated through the mitigation measures set out in the 2021 WSI (Wessex Archaeology 2021; Technical Appendix U18-2). These measures will primarily take the form of watching briefs during the backhoe dredging operations and the implementation of a Protocol for Archaeological Discoveries at all times and for all works activities. The measures in the 2021 WSI would supersede all the measures suggested in the 2012 WSI.

8.5 With regard to Aviation, further mitigation will be required, over and above that committed to as part of the DCO application, in relation to the potential for 200 m maximum height quay-side cranes. Should the decision to deploy the newly proposed taller cranes be confirmed during detailed design, the recommended notification, consultation and lighting mitigation recommendations set out in Chapter 22 of the PEIR should be implemented.

9.0 Cumulative and In-Combination Effects

In-Combination Effects

9.1 As confirmed within the various technical chapters of the PEIR, no additional or alternate sensitive receptors have been identified beyond those contained within the original ES. Furthermore, no additional or alternate significant effects have been identified by the technical chapters and their associated assessments.

9.2 In undertaking the PEIR, SLR has not identified any additional or alternate potential interaction linkages (i.e. ways for individual effects to interact across topics) beyond those identified within the original ES.

- 9.3 On this basis, with a nil change scenario for both sensitive receptors and significant effects, there is no alteration to the consideration of in-combination effects beyond those contained within the original ES.

Cumulative Effects

- 9.4 Chapter 6 (Description of Committed Developments) of the PEIR provides an overview of the committed development in the vicinity of the application site at this point in time (April 2021), whether any previously identified committed developments are no longer of relevance (i.e. expiry of a planning permission), and which more recent committed developments are of relevance when considering cumulative effects.
- 9.5 Each individual topic chapter contained within the PEIR has duly considered the list of committed developments identified within Chapter 6 (Description of Committed Developments) and provided an assessment of the potential for additional cumulative effects beyond those identified within the original ES.
- 9.6 None of the technical chapters contained within the PEIR has identified a change or an increased risk of cumulative effects associated with the committed developments identified as a result of the proposed material amendment. As such, the consideration of cumulative effects remains consistent with those contained within the original ES and found to be acceptable in the making of the DCO.

Transboundary Effects

- 9.7 The original ES for the DCO was subject to a Transboundary Consultation Process in accordance with PINS Advice Note 12 and considered the potential for such effects on the basis of Commercial Fisheries, Commercial and Recreational Navigation and Ecology (Marine Mammals, Designated Sites and Birds).
- 9.8 The proposed material amendment will not raise any additional or alternate Transboundary Effects beyond those considered within the original Transboundary Consultation Process. As such, no further consultation need be undertaken as a result of the proposed material amendment.

10.0 Conclusion

- 10.1 This Non-Technical Summary (NTS) outlines the conclusions reached in the PEIR that supports the application for the 'material change 2' at Able Marine Energy Park (AMEP) in Killingholme, North Lincolnshire. As stated earlier, the proposed material change relates to:
- Changes to the proposed quay layout to reclaim the specialist berth at the southern end of the quay, and to set back the quay line at the northern end of the quay to create a barge berth;
 - The addition of options to the form of construction of the quay whereby the piled relieving slab to the rear of the quay could be raised or omitted entirely (subject to detailed design), and the quay wall piles could be restrained with more conventional steel anchor piles and tie bars in lieu of flap anchors;
 - A change to the approved diversion of footpath FP50 in North Lincolnshire to avoid crossing over the existing rail track at the end of the Killingholme Branch Line;

- Provision of a third cross dam within the reclamation area to enable greater flexibility for staged completion, and early handover of sections of the quay;
- A change to the consented deposit location for 1.1M tonnes of clay to be dredged from the berthing pocket, to permit its disposal at HU082 or another approved location if required; and
- An amendment to the sequencing of the quay works (as illustrated on the consented DCO drawings AMEP_P1D_D_101 to 103; Indicative Sequence Plan View[s]) to enable those works to commence at the southern end of the quay and progress northwards.

- 10.2 The proposed material amendment has been assessed for additional environment effects beyond those contained within the original ES for the DCO. This has been undertaken through the preparation of the PEIR and the associated technical assessments contained or referenced herein.
- 10.3 In accordance with the EIA Regulations, consideration has been given to assessing additional potential effects during both the construction and operational phases of the development, whilst effects have been analysed in terms of residual and cumulative; temporary and permanent (short and long term); and beneficial, negligible and adverse.
- 10.4 It is acknowledged that the proposed development, as assessed within the original ES, will result in a number of adverse effects, some of which are considered 'significant' from an impact perspective. However, through the undertaking of the PEIR, it has been assessed that there will be no additional or alteration of the significant effects identified within the original ES.
- 10.5 On this basis, the conclusion is reached that the proposed material amendment is appropriate in the context of the DCO and that there are adequate mitigation measures available to ensure that the proposed development could proceed, as amended, without giving rise to unacceptable environmental effects, even in combination with the other committed developments identified.
- 10.6 The mitigation measures identified within the original ES and DCO, along with any alternate or additional mitigation and monitoring identified herein, would ensure to minimise any adverse residual effects on the existing environment or local amenity.
- 10.7 On this basis, subject to the completion of an Updated ES, there should be no foreseeable reason why the proposed material amendment would be considered inappropriate or unacceptable from an environmental impact perspective.

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