

Net Zero Teesside Project

Planning Inspectorate Reference: EN010103

Land at and in the vicinity of the former Redcar Steel Works site, Redcar and in Stockton-on-Tees, Teesside

The Net Zero Teesside Order

Document Reference: 6.7a DCO Non-Material Change - Environmental Statement
Addendum Volume I – Main Text

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended)

The Infrastructure Planning (Applications: Prescribed Forms and Procedure Regulations 2009 – Regulation 5(2)(a)



Applicants: Net Zero Teesside Power Limited (NZN Power Ltd) & Net Zero North Sea Storage Limited (NZNS Storage Ltd)

Date: March 2025

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1. Introduction and Scope of DCO Environmental Statement Addendum

1.1 Introduction

Background

- 1.1.1 On 16 July 2021, Net Zero Teesside Power Limited and Net Zero North Sea Storage Limited (the 'Applicants') made an application for a Development Consent Order (DCO) under the Planning Act 2008 to the Planning Inspectorate (who considers such applications on behalf of the Secretary of State for Energy Security and Net Zero (DESNZ) (the 'DCO Application'). The DCO Application was accepted for examination on 16 August 2021.
- 1.1.2 The DCO Application was for development consent for the construction, operation and maintenance of the Net Zero Teesside Project ('NZT'), including associated development (together the 'Proposed Development') on land at and in the vicinity of the former Redcar Steel Works site, Redcar, and on land in Stockton-on-Tees, on Teesside (the 'Site'). The former Redcar Steel Works site is within the landownership South Tees Development Corporation (STDC).
- 1.1.3 On 16th February 2024, the Secretary of State for DESNZ granted development consent for the DCO Application. Accordingly, the Net Zero Teesside Order 2024 was made on 16 February 2024 and came into force on 11 March 2024 (the 'Order').
- 1.1.4 This non-material change to the Order proposes the following changes (together 'the Proposed Development Changes') to 'Schedule 1 – Authorised Development' of the Order:
- 1.1.5 Change 1 - The addition of 'Work No 6A' which would comprise an Above Ground Installation (or 'AGI') for the CO₂ gathering network and associated apparatus to be located at Seal Sands and the addition of 'Work No 9G' consisting of a temporary construction laydown area to be located on land adjacent to the new AGI at Work No. 6A. The proposed AGI under Work No 6A is located within the Order Limits, with the proposed temporary laydown area requiring new land to be included within the Order Limits. The temporary laydown is needed to facilitate the construction of the Proposed AGI.
- 1.1.6 Change 2 – An extension to the area allocated for Work No. 2B (natural gas AGI) at the CATS Terminal (Seal Sands). This minor expansion of the proposed AGI area for Work No. 2B follows further detailed land discussions with interested parties and is located entirely within the existing Order Limits and within the existing area of Work No 2A (natural gas pipeline).
- 1.1.7 Change 3 – Within the Power, Capture and Compression ('PCC') site, the Applicants propose the addition of a new AGI under Work No. 6A and the



realignment of the carbon dioxide gathering network under Work No. 6. Both the new AGI and realigned CO₂ pipeline are located entirely within the existing Order Limits.

- 1.1.8 Change 4 – Areas of land to be added to existing Work No. 3A (electrical connection) within Schedule 1 of the Order, this includes areas both within and outside the original Order Limits. The proposed additional area of above ground and underground high voltage ('HV') cabling under Work No. 3A would also include two structures to support cables as they pass over intervening railway lines and pipelines.
- 1.1.9 In association with the Work No. 3A change set out above, the Applicants will also request a change to Requirement 4 of Schedule 2 (Requirements) of the Order, as a means to ensure that details of the two proposed cable structures are submitted for the approval of the relevant planning authority. The proposed amendments to the Requirement 4 text are provided on the following page.
- 1.1.10 This DCO Non-Material Change ES Addendum is provided in support of the non-material change application (hereafter referred to as the 'Change Application') that is now being submitted to the Secretary of State for DESNZ.

Purpose of this document

- 1.1.11 As a result of the Change Application, the Environmental Statement [**APP-083 to APP-347**] submitted as part of the DCO Application (hereafter referred to as the 'Original ES') was reviewed to identify if any of the Proposed Development Changes altered the scope and conclusions of the Original ES.
- 1.1.12 This DCO Non-Material Change ES Addendum should be read in conjunction with the Original ES as amended by the First ES Addendum [AS-049 to AS-132], the Second ES Addendum [**REP6-106 to REP6-108**], Cumulative Greenhouse Gas Onshore and Offshore Assessment [**REP6-123**], the Third ES Addendum [**REP 12-118 – REP12-119**], Habitat Regulations Assessment (HRA) [**REP12-121**], the post Examination HRA Addendum¹ submitted August 2023 in response to the Secretary of State's Request for further information dated 16 May 2023, and the Technical Note to the Environment Agency and Natural England on Nitrogen Deposition submitted December 2023². This is hereafter referred to as the "**Original ES (as amended)**". This document also identifies where this DCO Non-Material Change ES Addendum text supersedes the Original ES (as amended) text.
- 1.1.13 This DCO Non-Material Change ES Addendum considers how the Proposed Development Changes affect the assessments presented in the Original ES (as amended). It does not consider that there are any changes in baseline conditions which were not previously considered in the Original ES as amended. Where there is no significant change to an assessment (i.e. no

¹ [https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010103/EN010103-002815-NZT%20DCO%206.6%20-%20Wider%20Project%20ES-HRA%20Addendum%20incl.%20Appendix%201%20\(SoS%20RFI\)%204%20Aug%2023.pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010103/EN010103-002815-NZT%20DCO%206.6%20-%20Wider%20Project%20ES-HRA%20Addendum%20incl.%20Appendix%201%20(SoS%20RFI)%204%20Aug%2023.pdf)

² <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010103/EN010103-002887-Appendix%202%20-%20Main%20Letter%20-%20Technical%20Note%20to%20EA%20&%20NE%20re%20Nitrogen%20Deposition.pdf>



materially different effects) then the likely significant effects are the same as those listed in the Original ES (as amended).

- 1.1.14 The Proposed Development Changes are refinements to the extent of works consented under the Order, which are required as a result of detailed design in connection with the Proposed Development. As it is the changes to the extent of works that triggers potential changes to the environmental effects reported on in the Original ES (as amended), this DCO Non-Material Change ES Addendum assesses the impact of the Proposed Development Changes on environmental receptors and assesses whether they will give rise to any likely significant effects by reference to the Order Work Numbers.

1.2 Scope and methodology of the ES Addendum

Overview

- 1.2.1 Throughout this DCO Non-Material Change ES Addendum, references are given to the Examination Library numbers assigned by PINS (identified within square brackets, e.g. [APP-043] for information accepted for Examination and to the Applicant's document numbers ('Application Document Ref.' numbers) for documents which are submitted as part of this Change Application.
- 1.2.2 A glossary of terms and list of abbreviations used in this DCO Non-Material Change ES Addendum is provided within the Original ES Vol I Cover and Contents [APP-082].
- 1.2.3 The general assessment methodology (specifically Chapter 2 Assessment Methodology submitted with the DCO Application [APP-084]) and topic-specific methodologies, relevant legislation, policy and guidance, key assumptions and limitations set out in the Original ES (as amended) remain unchanged unless specifically stated in this DCO Non-Material Change ES Addendum.

1.3 Structure of this ES Addendum

- 1.3.1 This DCO Non-Material Change ES Addendum comprises of two volumes:
- DCO Non-Material Change ES Addendum Volume I (this document) - describes the modifications to the Work Numbers which have triggered the Proposed Development Changes and outlines whether the changes affect the Original ES (as amended); and
 - DCO Non-Material Change ES Addendum Volume II - provides updated ES figures.
- 1.3.2 This DCO Non-Material Change ES Addendum is also accompanied by a DCO Non-Material Change ES Addendum Non-Technical Summary (NTS) (Document Ref. 6.7c) which provides a summary of the key findings from the ES Addendum in non-technical language. The DCO Non-Material Change ES Addendum NTS provides an update to the NTS submitted with the DCO Application [APP-081, AS-049, REP12-117].



2. Proposed Development Changes

2.1 Introduction

- 2.1.1 This chapter of the DCO Non-Material Change ES Addendum presents a description of the Proposed Development Changes, including whether the relevant change modifies the description of the Proposed Development as consented in the Order.

2.2 Description of Proposed Development Changes

- 2.2.1 Since the grant of the Order, four changes have been identified arising from continued Front End Engineering Design work.
- 2.2.2 The four changes have resulted in changes in the Work Numbers for the Proposed Development. These changes are set out in the amended Schedule 1 of the Order.
- 2.2.3 Each of the modifications to the Work Numbers associated with the Proposed Development Changes is explained below. Where necessary, Section 3 of this ES Addendum provides an explanation of how chapters of the Original ES (as amended) would change as a result of the Proposed Development Changes if the description of the Proposed Development has changed.
- 2.2.4 An updated Site Location Plan is presented as Figure 1-1 of the DCO Non-Material Change ES Addendum Volume II (Document Ref. 6.7b). The Order Limits are presented in Figure 3-1 and Figure 3-2 of the DCO Non-Material Change ES Addendum Volume II (Document Ref. 6.7b).
- 2.2.5 The Change Application will seek the following changes (together 'the Proposed Development Changes') to Schedule 1 'Authorised Development' of the Order:

Change 1: Work No. 6A (AGI at Seal Sands) & Work No. 9G (Temporary Construction Laydown Area for AGI)

- 2.2.6 Change 1 - The addition of 'Work No. 6A' which would comprise an Above Ground Installation ('AGI') to allow a future spur off the CO₂ gathering network and associated apparatus to be located at Seal Sands; and the addition of 'Work No 9G' to the Order consisting of a temporary construction laydown area for Work No. 6A located on land adjacent to the location of the new AGI. The proposed AGI is located within the existing Order Limits. The proposed temporary laydown area requires new land to be included within the Order Limits. The temporary laydown area in Work No. 9G is needed to facilitate the construction of the new AGI and will be used for the laydown and storage of plant and materials, along with the parking of construction site personnel vehicles. Whilst the additional land is located outside the existing Order Limits, the Applicants are not seeking any compulsory acquisition powers over the land as the land will be secured by agreement.



Change 2: Work No. 2B (AGI Area Extension)

- 2.2.7 Change 2 – An extension to the area allocated for Work No. 2B (natural gas AGI) at the CATS Terminal (Seal Sands). This minor expansion of the proposed AGI area for Work No. 2B of approximately 770 m² follows further detailed land discussions with interested parties and is located entirely within the existing Order Limits and within the existing area of Work No. 2A (natural gas pipeline).

Change 3: Work No. 6 (PCC Site CO₂ Gathering Network Realignment) & Work No 6A (PCC Site AGI)

- 2.2.8 Change 3 - Within the Power, Capture and Compression ('PCC') Site, the Applicants propose the addition of a new AGI under Work No. 6A and the realignment of the CO₂ gathering network under Work No. 6. Both the new AGI and realigned CO₂ pipeline are located entirely within the existing Order Limits.

Change 4: Work No. 3A (Additional HV cabling areas)

- 2.2.9 Change 4 - Areas of land to be added to existing Work No. 3A (electrical connection), including areas both within and outside the existing Order Limits to facilitate the construction of the electrical connection. The proposed additional areas will allow for the construction of two new cable support structures adjacent to existing bridges over the Tees Valley Line, River Fleet and existing pipelines to carry the cables. This is rather than installing the cables along the existing support structures as previously described in the Original ES (as amended).
- 2.2.10 In order to control the design of the cable structures, which are to be included as part of Work No. 3A, the Applicants are also seeking a change to Requirement 4 (Work No. 3) at Schedule 2 'Requirements' of the Order, as a means to ensure that details of the two proposed cable support structures are submitted for the approval of the relevant planning authority.



3. Changes to the Original Environmental Statement (as Amended)

3.1 Introduction

- 3.1.1 This chapter of the ES Addendum describes any changes in the introductory chapters of the Original ES (as amended) required as a result of the modifications to the extent of works associated with the Proposed Development Changes. Other than these changes, the introductory chapters of Original ES (as amended) remain valid.

3.2 Changes to Chapters 1-7 of the Original ES (as amended)

Chapter 1 – Introduction

- 3.2.1 The general background to the DCO Application and the description of the Proposed Development remains as described in the Original ES other than as amended by the Proposed Development Changes. Further consultation has taken place in respect of the Proposed Development Changes, which is detailed in Section 6 of this ES Addendum, however no changes are required to **Chapter 1: Introduction [APP-083]** of the Original ES.

Chapter 2 – Methodology

- 3.2.2 The assessment methodology and topic-specific methodologies, relevant legislation, policy and guidance, key assumptions and limitations set out in **Chapter 2: Assessment Methodology [APP-084]** remain unchanged so far as relevant to the Proposed Development Changes.

Chapter 3 – Description of the Existing Environment

- 3.2.3 The overall description of the Proposed Development Order Limits (hereafter referred to as ‘the Site’) set out in **Chapter 3: Site Description of the Existing Environment [APP-085]** remains unchanged and there have been no increases or reductions in the distances measured between the Order Limits and receptors as a result of the Proposed Development Changes, except limited very minor changes which where relevant are set out in the tables below.
- 3.2.4 The Proposed Development Changes increase the Order Limits such that the area of the Site has been increased from approximately 245 ha to 247 ha. The overall change in the Order Limits is shown on updated Figure 6-3.



Chapter 4 – Proposed Development

- 3.2.5 Minor updates have been made to in **Chapter 4: Proposed Development [APP-086]** to reflect the Proposed Development Changes, these have been tabulated below. Each table compares the text presented in the Original ES (as amended) where relevant, and the replacement text to describe the change.

Change 1: Work No. 6A (AGI at Seal Sands)

Original ES (as amended) text for paragraph 4.3.37 [APP-086]

Replacement text for paragraph 4.3.37

<p>The capture and compression of CO₂ from third-party industrial emitters at source does not form part of the Application and is not considered in this ES but will be the subject of separate consent applications as and when investment decisions are made by third-party operators to connect into the CO₂ Gathering Network infrastructure.</p>	<p>The capture and compression of CO₂ from third-party industrial emitters at source does not form part of the Application and is not considered in this ES but will be the subject of separate consent applications as and when investment decisions are made by third-party operators to connect into the CO₂ Gathering Network infrastructure. <u>The CO₂ Gathering Network will include a new AGI (Work No. 6A) required to enable a future spur line connection to potential emitters.</u></p>
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Change 2: Work No. 2B (AGI Area Extension)

No changes to the Original ES (as amended) are required for this Proposed Development Change.

Change 3: Work No. 6 (PCC Site CO₂ Gathering Network Realignment) & Work No. 6A (PCC Site AGI)

Original ES (as amended) text for paragraph 4.3.39 [APP-086]

Replacement text for paragraph 4.3.39

<p>The CO₂ Gathering Network will predominantly use an existing above ground pipe racking network and using existing culverts and overbridges. The CO₂ Gathering Network is proposed to start in Billingham, pass through the Seal Sands industrial area and cross under the River Tees before entering the</p>	<p>The CO₂ Gathering Network will predominantly use an existing above ground pipe racking network and using existing culverts and overbridges. The CO₂ Gathering Network is proposed to start in Billingham, pass through the Seal Sands industrial area and cross under the River Tees before entering</p>
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**Original ES (as amended) text for
paragraph 4.3.39 [APP-086]**

**Replacement text for paragraph
4.3.39**

PCC Site for high pressure (HP) compression.	the PCC Site for high pressure (HP) compression <u>via a new AGI (Work No. 6A).</u>
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Change 4: Work No. 3A (Additional HV Cabling Areas)

**Original ES (as amended) text for
paragraph 4.3.66 [REP6-107]**

**Replacement text for paragraph
4.3.66**

The Electrical Connection runs from Tod Point to the PCC site in Teesworks land and will cross the Tees Valley railway line using the existing road bridge.	The Electrical Connection runs from Tod Point to the PCC site in Teesworks land and will cross the Tees Valley railway line <u>and River Fleet using steel framed cable support structures adjacent to the existing road bridges.</u>
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Chapter 5 – Construction Programme and Management

- 3.2.6 Minor updates which have been made to **Chapter 5: Construction Programme and Management [APP-087]** to reflect the changes proposed, these have been tabulated below. Each table compares the text presented in the Original ES (as amended) where relevant, and the replacement text to describe the change.

Change 1: Work No. 6A (AGI at Seal Sands) & Work No. 9G (Temporary Construction Laydown Area for AGI)

Table 5-2 of the Original ES (as amended) has been updated to include the additional proposed Temporary Construction Laydown Area for the AGI at Seal Sands (Work No. 9G). This is shown below in Table 3-1.

Table 3-1: Updated Laydown Areas for the Proposed Development (amended from Table 5-2 [APP-087])

Work No.	Location	Period Required*	Use
9A	South bank of Tees, on Teesworks Land adjacent to PCC Site	2023 - 2026	Temporary construction and laydown area (including parking)
9B	North bank of Tees, land at Navigator Terminals	2023 - 2026	Temporary construction and laydown area



Work No.	Location	Period Required*	Use
9C	North bank of Tees, land at INEOS	2023 - 2026	Temporary construction and laydown area (including parking)
9D	North bank of Tees, Saltholme (off Seaton Carew Road)	2023 - 2026	Temporary construction and laydown area (including parking and welfare)
9E	North bank of Tees, Saltholme	2023 - 2026	Temporary construction and laydown area (including laydown and access)
9F	North bank of Tees, Haverton Hill	2023 - 2026	Temporary construction and laydown area (including parking and welfare)
9G	<u>North bank of Tees, AGI at Seal Sands</u>	<u>2023 – 2026</u>	<u>Temporary construction and laydown area (including parking)</u>

*Indicative, based on a construction start date of Q4 2022

Change 2: Work No. 2B (AGI Area Extension)

No changes are required to the Original ES (as amended) for this Proposed Development Change.

Change 3: Work No. 6 (PCC Site CO₂ Gathering Network Realignment) & Work No. 6A (PCC Site AGI)

No changes are required to the Original ES (as amended) for this Proposed Development Change.

Change 4: Work No. 3A (Additional HV Cabling Areas)

Original ES text for paragraph 5.3.60 [APP-087]	Replacement text for paragraph 5.3.60
<p>The crossing of the Redcar to Middlesbrough section of the Tees Valley railway line will be facilitated either by using an existing Teesworks bridge (Option 1A) or by using a proposed new bridge (either the conveyor bridge to be installed for the York Potash project or a new Teesworks bridge that is proposed to be developed by the landowner) (Option 1B) (see Figure 5-3, ES Volume II, Document Ref. 6.3, for the routing</p>	<p>The crossing of the Redcar to Middlesbrough section of the Tees Valley railway line and the River Fleet will be facilitated by <u>steel framed cable support structures to be constructed adjacent to the existing road bridges which are required for the cables to cross over the Tees Valley Line railway, River Fleet and existing pipelines.</u></p>



**Original ES text for paragraph 5.3.60
[APP-087]**

**Replacement text for paragraph
5.3.60**

of Options 1A and 1B). These two options only relate to the routeing of the cables across part of the Teesworks site and crossing the Tees Valley railway line and are due to uncertainty in the timing and exact location of third party infrastructure being developed in this part of the Site by the site operator and York Potash project. This infrastructure will be used to facilitate the crossing of the rail line by the electrical connection for the Proposed Development.	
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Table 5-7 (Special Crossings on the Electrical Connection Corridor) of the Original ES (as amended) [APP-087] has been updated to include the proposed steel framed cable structures. This is shown below in Table 3-2.

Table 3-2: Special Crossing on the Electrical Connection Corridor

Crossing Name	Grid Reference	Description	Type	Existing/ Upgraded/ New
Route Options 1A and 1B				
EC1	457093, 542608	Blue Main (Teesworks)	Open Cut	New
<u>EC2</u>	<u>457114, 524415</u>	<u>Fleet (Watercourse)</u>	<u>Steel Framed Cable Structure</u>	<u>New</u>
EC5	456948, 523808	Minor Road (Tod Point)	HDD or Open Cut	New
Route Option 1A Only				
<u>EC3</u>	<u>457099, 524068</u>	<u>Operational Rail</u>	<u>Steel Framed Cable Structure</u>	<u>New</u>
EC4	456915, 523859	Access road (Teesworks)	HDD or Open Cut	New
Route Option 1B Only				
EC6	457160, 524200	Minor Road (Teesworks)	York-Potash Conveyor	New
EC7	457226, 524116	Operational Rail	York-Potash Conveyor	New
EC8	457097, 523957	Minor roundabout (Tod Point)	HDD	New



Chapter 6 – Alternatives and Design Evolution

3.2.7 An additional table (Table 3-3) has been included to describe the Proposed Development Changes (see below).

Table 3-3: Changes in Likely Significant Effects (LSEs) as a result of the Proposed Development Changes [APP-088]

Change	Reason for Change	Changes in Environmental Likely Significant Effects (LSEs)
1	Refined based on further studies by the Applicants	Environmental LSEs are the same or lower than assessed in the Original ES (as amended) prior to the Proposed Development Changes
2	Refined based on further studies by the Applicants	Environmental LSEs are the same or lower than assessed in the Original ES (as amended) prior to the Proposed Development Changes
3	Refined based on further studies by the Applicants	Environmental LSEs are the same or lower than assessed in the Original ES (as amended) prior to the Proposed Development Changes
4	Refined based on further studies by the Applicants	Environmental LSEs are the same or lower than assessed in the Original ES (as amended) prior to the Proposed Development Changes



Chapter 7 - Legislation and Policy

- 3.2.8 None of the changes reported on in this Addendum have been driven by legislative changes in national, regional or local policy. At the national level, in March 2024 the Government released a revised suite of National Policy Statements (NPS) for national infrastructure developments. Whilst the policy contained in the NPS documents (including that which covered assessment principles) has not experienced substantive change, NPS EN-1 now sets out several types of infrastructure (including proposals for natural gas with CCS) which are now considered to be form a 'critical national priority' (CNP). EN-1 considers CNP infrastructure to be urgently needed for both energy security and achieving Net Zero. There have been no relevant updates to regional or local policy.
- 3.2.9 Taking account of the revised NPSs, the Applicants note that the relevant national and local policy in regard to the Proposed Development (and Proposed Development Changes) has not substantially changed compared to that taken into account by the Secretary of State in deciding to grant the DCO. As a result, Chapter 7: Legislative Context and Planning Policy [APP-089] has not been updated.



4. Environmental Assessment of Proposed Development Changes

4.1 Introduction

- 4.1.1 This chapter of the DCO Non-Material Change ES Addendum identifies the changes in likely significant environmental effects that arise as a result of the Proposed Development Changes, compared to those reported in the Original ES (as amended).

4.2 Scope and methodology for the assessment of the proposed development changes

- 4.2.1 A preliminary environmental assessment (screening) of whether the Proposed Development Changes would change the baseline or alter the outcomes of the previous assessments presented within the Original ES (as amended) has been completed. The screening exercise has not identified any changes in likely significant environmental effects as a result of the Proposed Development Changes.

4.3 Screening Assessment of the Proposed Development Changes

- 4.3.1 The results of the screening assessment are presented below in Tables 4-1, 4-2, 4-3 and 4-4. The screening assessment has identified that the Proposed Development Changes will not affect the likely significance of effects predicted for Air Quality, Surface Water, Flood Risk and Water Resources, Geology and Contaminated Land, Noise and Vibration, Terrestrial Ecology, Aquatic Ecology, Marine Ecology, Ornithology, Traffic, Landscape and Visual Amenity, Cultural Heritage, Marine Heritage, Socio-Economics, Climate Change, Major Accidents and Disasters, Public Health and the Summary of Significant Effects chapters.

Table 4-1: Summary of Changes in Environmental Likely Significant Effects for Change 1 – Work No. 6A (New AGI) & Work No. 9G (Temporary Construction Laydown Area for AGI)

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 1 – Work Nos. 6A and 9G
Chapter 8 Air Quality [APP-090] 8A Air Quality - Construction Phase [APP-247] 8B Air Quality - Operation Phase [APP-248] 8C Air Quality - Amine Degradation Assessment [APP-249]	Out	<p>Proposed Development Change 1 does not have the potential to change the conclusions of the air quality assessment carried out within the Original ES (as amended).</p> <p>Construction phase emissions of dust would be similar to and in any event no worse than the emissions consented under the Order in terms of potential magnitude, frequency and the proximity of sensitive receptors. Dust emissions can be adequately controlled by the secured good practice measures.</p> <p>There will be no change to emissions to air during the operational phase, which will be controlled through the Environmental Permit.</p> <p>There will therefore be no change to the likely significant effects reported within the Original ES (as amended).</p>
Chapter 9 Surface Water, Flood Risk and Water Resources [APP-091] 9A Flood Risk Assessment [APP-250 to APP-252] 9B Background Water Quality [APP-253] 9C WFD Assessment [APP-254]	Out	<p>Proposed Development Change 1 does not have the potential to change the conclusions of the surface water, flood risk and water resources assessment carried out within the Original ES (as amended).</p> <p>With the mitigation measures outlined in relation to the water environment in the ES, notably best practice measures in the CEMP and Water Management Plan secured through the DCO, then no adverse impact would be anticipated to surface or groundwater quality, hydromorphology or groundwater flows or water resources. There will be no change to the likely significant effects reported in the Original ES (as amended).</p> <p>The changes are located on land considered to be at low risk of flooding from fluvial and tidal sources and surface water. With the mitigation measures outlined in relation to flood risk in the</p>

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 1 – Work Nos. 6A and 9G
		Flood Risk Assessment and the ES adopted, including best practice measures in the CEMP, no adverse impacts are anticipated to or from flood risk sources. Therefore, there will be no changes to the flood risks reported in the Flood Risk Assessment.
<p>Chapter 10 Geology and Contaminated Land [APP-092]</p> <p>10A Preliminary Sources Study Report [APP-255 to APP-292]</p> <p>10B Contaminated Land-Conceptual Site Model [APP-293]</p> <p>10C Contaminated Land Environmental Risk Assessment [APP-294]</p> <p>10D Geotechnical Risk Register [APP-295]</p>	Out	<p>Proposed Development Change 1 does not have the potential to change the conclusions of the geology and contaminated land assessment carried out within the Original ES (as amended).</p> <p>Construction work in North Tees (Work Nos. 6A, 9G, 2B) will take place within an area of historical sub-surface mineral working (Saltholme Brinefield) and adjacent to a number of historical industrial land uses which have already been included as part of the Original ES (as amended) assessment. The Proposed Development Change will not change the results of this assessment.</p>
<p>Chapter 11 Noise and Vibration [APP-093]</p> <p>11A Construction Noise Assessment Methodology [APP-296]</p>	Out	<p>Proposed Development Change 1 does not have the potential to change the conclusions of the noise and vibration assessment carried out within the Original ES (as amended).</p> <p>The construction of the above ground installation Work No. 6A will require use of 20 tonne excavators and dumpers. In this location the “topsoil strip” activity that was assessed for construction of the CO₂ Gathering Network in the ES will occur. This “topsoil strip” activity has a higher sound power level than the plant for the construction of the AGI so the Original ES</p>

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 1 – Work Nos. 6A and 9G
11B Operational Noise Information [APP-297]		(as amended) assessment remains worst case and further detailed assessment is not required.
Chapter 12 Terrestrial Ecology [APP-094] 12A Legislation and Planning Policy Relevant to Ecology [APP-298] 12B Ecological Impact Assessment Methods [APP-299] 12C Preliminary Ecological Appraisal [APP-300 to APP-304] 12D Bat Survey Report [APP-305 to APP-306] 12E Reptile Survey Report [APP-307] 12F Terrestrial Invertebrate Survey Report [APP-308] 12G Water Vole and Otter Survey Report [APP-309]	Out	<p>Proposed Development Change 1 does not have the potential to change the conclusions of the terrestrial ecology assessment carried out within the Original ES (as amended).</p> <p>The location of the AGI (Work No. 6A) is an area of compacted made ground. Some of the area that would be affected by land take comprises unsurfaced tracks and hard standing that are predominantly unvegetated. The wider area for the new AGI (Work No. 9G) comprises a closed sward of semi-improved, neutral grassland of secondary origin. There are also dense stands of bramble scrub at the margins of the grassland. Given the above context, there would be no land take from priority habitats for construction of the AGI.</p> <p>The area proposed for temporary construction laydown meets the definition for the open mosaic habitats (OMH) on previously developed land priority habitat type and is being invaded by scrub. Whilst this habitat would experience a short-term impact this remains consistent with, and no worse than, the impact assessment in Chapter 12 of the Environmental Statement. This short duration disturbance, including loss of invading scrub, is also consistent with typical habitat management regimes or objectives for OMH i.e. the short duration impact during construction laydown is likely to benefit the habitat longer term as it will help to maintain OMH of optimal structure.</p> <p>The habitats present are not subject to any nature conservation designations, and no species are likely to occur that were not assessed previously in the ES in relation to works on adjacent land within the Order Limits.</p> <p>The works proposed in terms of their extent, duration or magnitude, would remain within the parameters assessed in the ES, and consequently no likely significant effects are predicted. The small area of habitat loss to the new AGI is not (after application of the existing committed</p>

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<p>12H Supplementary Habitat Information Report Coatham Sands [APP-310 to APP-311]</p> <p>12I Terrestrial Invertebrate Survey Coatham Dunes [APP-312]</p> <p>12J GCN Report [APP-313]</p>		<p>mitigation) likely to impact the nature conservation status of any relevant species or result in likely significant effects (i.e. any impact that occurs would be at a local/site scale only and would not result in adverse likely significant effects).</p> <p>The ecological mitigation previously agreed with consultees (as secured under the Order by Requirements 4 and 15³) therefore remains suitable and would apply to the proposed activities.</p>
<p>Chapter 13 Aquatic Ecology [APP-095]</p> <p>13A Aquatic Ecology Supplementary Desk Study and Field Survey Report [APP-314]</p>	Out	<p>Proposed Development Change 1 does not have the potential to change the conclusions of the aquatic ecology assessment carried out within the Original ES (as amended).</p> <p>No waterbodies would be directly or indirectly affected during construction, operation and decommissioning and there are no pathways for impacts on aquatic ecology.</p>
<p>Chapter 14 Marine Ecology [APP-096]</p> <p>14A Intertidal Benthic Ecology Survey Report [APP-315]</p>	Out	<p>Proposed Development Change 1 does not have the potential to change the conclusions of the marine ecology assessment carried out within the Original ES (as amended).</p> <p>The construction of the proposed AGI falls within the worst case assessment of airborne noise at that location (the “topsoil strip” activity has a higher sound power level than the plant for the construction of the new AGI). Therefore, the reasonable worst case assessment of likely significant effects to seals and other marine receptors, remains the same. Furthermore, the</p>

³ https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010103/EN010103-002915-DCO_Net%20Zero%20Teesside%20Project.pdf

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 1 – Work Nos. 6A and 9G
<p>14B Fisheries and Fish Ecology Baseline [APP-316 to APP-318]</p> <p>14C Marine Mammal Baseline [APP-319]</p> <p>14D Subtidal Benthic Ecology [APP-320]</p> <p>14E Coastal Modelling Report [APP-321]</p>		<p>location of these new works is outside the study area for Marine Mammals as described in the Original ES (as amended) and over 2 km from Seal Sands, where seals are known to haul-out and moult.</p>
<p>Chapter 15 Ornithology [APP-097]</p> <p>15A Ornithology Baseline [APP-322 to APP-325]</p> <p>15B CONFIDENTIAL Ornithology Baseline [APP-326]</p>	<p>Out</p>	<p>Proposed Development Change 1 does not have the potential to change the conclusions of the ornithology assessment carried out within the Original ES (as amended).</p> <p>The works at this location were reported in the ES as being the installation of pipeline connections on existing pipe racking only. By comparison, the Proposed Development Change, the installation of the proposed AGI will require approximately 0.32 ha of additional permanent land take that was not accounted for in the Original ES.</p> <p>The habitats present, as assessed from site photographs, include bare ground, short grassland/ephemeral vegetation and scrub with the potential to support small numbers of breeding birds, but with no potential to support qualifying species of any designated sites. Potential non-significant impacts may occur, including disturbance of breeding birds, permanent losses of nesting habitat and the potential to damage or destroy nests with the potential for bird mortality and brood losses. These potential impacts are non-significant due to the minimal area of habitat to be affected by the small-scale Proposed Development</p>

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 1 – Work Nos. 6A and 9G
		<p>Change in relation to the Proposed Development. Therefore, these changes do not have the potential to change the conclusions of the Original ES (as amended).</p> <p>A former water body to the west of the proposed AGI has been infilled and no longer provides habitat suitable for SPA or SSSI qualifying wetland bird species, therefore impacts on the Teesmouth and Cleveland Coast designations will not occur.</p>
<p>Chapter 16 Traffic [APP-098] 16A Transportation Assessment [APP-327 to APP-332] 16B Framework Construction Worker Travel Plan [APP-333] 16C Framework Traffic Management Plan [APP-334]</p>	<p>Out</p>	<p>Proposed Development Change 1 does not have the potential to change the conclusions of the traffic and transportation assessment carried out within the Original ES (as amended).</p> <p>The following additional construction traffic movements have been identified:</p> <p><u>AGI base</u></p> <ul style="list-style-type: none"> • 67 tipper movements for imported fill; • 54 tipper movements for ground build up, and • 7 x 4 concrete pours = 28 movements <p>Total of 149 HGV movements one-way.</p> <p><u>Culvert</u></p> <ul style="list-style-type: none"> • 55 dumper movements; • 2 pours per wall and 2 deliveries per pour, so 8 vehicle movements; • 19 precast units <p>Total of 82 HGV movements one-way</p> <p>Overall total is 231 (149+82) one-way vehicle movements (231 in and 231 out), which amounts to 462 two-way movements.</p>

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		<p>The time period is 4 to 6 months, so taking 4 months as a worst-case and 20 working days per month gives a total of 80 days.</p> <p>The daily total is $(462/80) = 6$ two-way movements per day, which is not considered to be a material difference, noting the industrial nature of the area and the significant level of existing vehicle movements on the highway network.</p> <p>With reference to Table 16-15, 2024 Base and Growth + Committed + Proposed Peak Pipeline Construction Development Two-Way Traffic flows, from Chapter 16: Traffic and Transport [APP-098] of the Original ES (as amended).</p> <p>The 2024 baseline level of total daily traffic on the network around Seal Sands is between 2,2567 on the B1275 Belasis Avenue and 8,361 on the A178 Seaton Carew Road.</p> <p>The Construction Traffic was then distributed onto all links to the north of the River Tees, with an increase of 130 total vehicles and 10 HGVs per day at the peak of construction on all links.</p> <p>This resulted in a maximum percentage increase of 5.1% in total vehicles and 13.3% in HGVs on Link 13 B1275 Belasis Avenue.</p> <p>As the conclusion in paragraph 16.6.31 and 16.6.31 of Chapter 16: Traffic and Transport [APP-098] of the Original ES (as amended) was that as this fell below the threshold of assessment whereby only those sensitive links that show a greater than 10% increase in total traffic flows (or HGV component) or, for all other links, a greater than 30% increase in total traffic or the HGV component are considered when assessing the traffic impact upon receptors, then no further assessment was required.</p>
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ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 1 – Work Nos. 6A and 9G
		Therefore, as the proposed additional works are predicted to increase traffic flows by 6 two-way movements per day, this is not considered to result in any material change to the above conclusions as set out in the ES Chapter and no further assessment is required.
Chapter 17 Landscape and Visual Amenity [APP-099] 17A Landscape Character [APP-335] 17B LVIA Proposed Methodology [APP-336] 17C Potential Viewpoints [APP-337]	Out	<p>Proposed Development Change 1 does not have the potential to change the conclusions of the landscape and visual amenity assessment carried out within the Original ES (as amended).</p> <p>The majority of the construction work will take place within the existing Order Limits (which was previously assessed in the ES). The construction of the AGI was not assessed. The AGI structures themselves are limited in terms of scale, with a maximum height not more than 7.2 m above current grade level. The AGI works will be undertaken within an area that is characterised by existing industrial development and lies in close proximity to tall structures including stacks. The Proposed Development Change will result in negligible to minor effects on landscape character and visual amenity. Due to the parameters already assessed, there will therefore be no change to the effects reported in the Original ES (as amended).</p>
Chapter 18 Cultural Heritage [APP-100] 18A Cultural Heritage Baseline Report [APP-338] 18B Cultural Heritage Gazetteer [APP-339]	Out	<p>Proposed Development Change 1 does not have the potential to change the conclusions of the cultural heritage assessment carried out within the Original ES (as amended).</p> <p>The construction work will take place within the existing Order Limits or within small extensions to it. As noted above in relation to Chapter 3 of the Original ES (as amended), the distances to receptors do not change and, as noted above, the AGI structures are limited in terms of scale (i.e. no more than 7.2 m above current grade level). Therefore, there will be no changes to the effects reported in the ES and no additional likely significant effects have been identified.</p>
Chapter 19 Marine Heritage [APP-101]	Out	Proposed Development Change 1 does not have the potential to change the conclusions of the marine heritage assessment carried out within the Original ES (as amended).

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 1 – Work Nos. 6A and 9G
		<p>The majority of the construction work will take place within the existing Order Limits or within small extensions to it. As noted above in relation to Chapter 3 of the Original ES (as amended), the distances to receptors does not change.</p> <p>The Proposed Development Change does not have an interaction with the assessment area for potential impacts to marine heritage assets that was agreed for the Original ES (as amended), which entails a 1 km study area below Mean High Water Springs. There will be no change to the effects reported in the ES and no additional likely significant effects have been identified.</p>
<p>Chapter 20 Socio-Economics [APP-102]</p> <p>20A Economics Benefits Report [APP-340]</p> <p>20B- Navigational Risk Assessment [APP-341 to APP-343]</p>	<p>Out</p>	<p>Proposed Development Change 1 does not have the potential to change the conclusions of the socio-economics assessment carried out within the Original ES (as amended).</p> <p>The works will not result in any employment receptor impacts and are unlikely to change the levels of disruption for local receptors noted in the ES.</p> <p>Due to the small-scale nature of the Proposed Development Changes, there will be no likely significant effects on socio-economic receptors above and beyond the Original ES (as amended) as a result of the Proposed Development Changes.</p>
<p>Chapter 21 Climate Change [APP-103], as amended by Cumulative Onshore and Offshore GHG Assessment [REP6-123]</p>	<p>Out</p>	<p>Proposed Development Change 1 does not have the potential to change the information presented to the Secretary of State for the greenhouse gas (GHG) emissions assessment, as set out within the Original ES (as amended).</p> <p>The original GHG assessment for the construction phase was carried out on the basis of outline design data. Construction emissions largely comprised the embodied carbon in materials and components, with this data being estimated based on building footprint areas, which was and remains appropriate and proportionate given the nature and magnitude of construction emissions in the context of overall lifecycle emissions for the Proposed Development. The quantitative estimate of construction phase emissions took place within the</p>

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 1 – Work Nos. 6A and 9G
		<p>context of a Rochdale Envelope approach to present a reasonable worst-case assessment, as described in Section 21.3.10 of Chapter 21 Climate Change of the Original ES (as amended). A full breakdown of construction phase emissions is provided in Table 21-9 of Chapter 21 Climate Change of the Original ES (as amended) [APP-103] together with the description of methodology and assumptions made. It is also important to note that construction emissions account for less than 0.5% of the total emissions for the Proposed Development when all direct and indirect emissions (including upstream well to tank emissions from the fuel supply chain) are taken into account.</p> <p>The methodology outlined above is consistent with established guidance and best practice⁴, and is based on an outline design approach that is not altered by the granularity of the Proposed Development Changes. Accordingly, the Proposed Development Changes will not alter the construction phase emissions figure that is presented in the Original ES (as amended).</p>
Chapter 22 Major Accidents and Disasters [APP-104]	Out	<p>Proposed Development Change 1 does not have the potential to change the conclusions of the major accidents and disasters assessment carried out within the Original ES (as amended).</p> <p>Any potential hazards that may be presented by the Proposed Development Changes have already been assessed within the Original ES (as amended). The Proposed Development Changes are small-scale and the works are very similar to those assessed within the Original ES (as amended). As such no likely significant effects are anticipated to occur as a result of the Proposed Development Change.</p>

⁴ The Applicants note the Government's consultation on Draft Supplementary Guidance for Assessing the Effects of Scope 3 Emissions from Offshore Oil and Gas Projects (DESNZ, October 2024). Whilst the Applicants note that the NZT Development and Proposed Development Changes do not form part of an offshore oil and gas project, the Applicants have reviewed the consultation draft guidance and consider it to be consistent with the assessment undertaken by the Applicants

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 1 – Work Nos. 6A and 9G
Chapter 23 Public Health [APP-105]	Out	<p>Proposed Development Change 1 does not have the potential to change the conclusions of the public health assessment carried out within the Original ES (as amended).</p> <p>Due to the small-scale nature of the Proposed Development Changes in relation to the Proposed Development and distance to human health receptors, there will be no likely significant effects above and beyond the Original ES (as amended) as a result of the works.</p>
Chapter 24 Cumulative and Combined Effects [APP-106] 24A Planned Development and Development Allocations [APP-344] 24B Assessment of Cumulative Effects Stages 1-3 [APP-345] 24C Statement of Combined Effects [APP-346]	Out	<p>Proposed Development Change 1 will not materially affect the Zone of Influence (ZOI), magnitude of predicted impacts, relative significance of likely effects or required mitigation measures associated with the Proposed Development. Therefore, Proposed Development Change 1 will not result in any change to the cumulative and/ or combined impacts/ effects assessed in the Original ES (as amended).</p> <p>For further detail, please refer to Section 5.</p>
Chapter 25 Summary of Significant Effects [APP-107]	Out	As the updated assessment of all of the above topics have confirmed that Proposed Development Change 1 will not result in any change to the summary of significant effects previously assessed in the Original ES (as amended), this chapter is not affected.
Habitats Regulations Assessment (HRA) (Document Ref. 5.13 Rev. 7.0)	Out	Proposed Development Change 1 does not have the potential to change the conclusions of the original Habitats Regulations Assessment. Further detail is provided within the HRA Addendum (Document ref 5.13a) provided within this DCO Non-Material Change Application.

Table 4-2: Summary of Changes in Likely Significant Environmental Effects for Change 2 – Work No. 2B (AGI Area Extension)

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 2 – Work No. 2B
Chapter 8 Air Quality [APP-090] 8A Air Quality - Construction Phase [APP-247] 8B Air Quality - Operation Phase [APP-248] 8C Air Quality - Amine Degradation Assessment [APP-249]	Out	<p>Proposed Development Change 2 does not have the potential to change the conclusions of the air quality assessment carried out within the Original ES (as amended).</p> <p>The changes to the AGI area extend Work No. 2B area slightly but are within the existing Order Limits.</p> <p>Construction phase emissions of dust will be similar to emissions assessed in the Original ES (as amended) in terms of potential magnitude, frequency and the proximity of sensitive receptors. Dust emissions can be adequately controlled by currently proposed good practice measures.</p> <p>There is no predicted change in operational emissions as a result of Proposed Development Change 2.</p> <p>There will therefore be no change to the likely significant effects reported within the Original ES (as amended).</p>
Chapter 9 Surface Water, Flood Risk and Water Resources [APP-091] 9A Flood Risk Assessment [APP-250 to APP-252] 9B Background Water Quality [APP-253]	Out	<p>Proposed Development Change 2 does not have the potential to change the conclusions of the surface water, flood risk and water resources assessment carried out within the Original ES (as amended).</p> <p>The changes to the AGI area are within the existing Order Limits and within the previously assessed parameters, but extend slightly outside the existing Works No. 2B area. No direct works are required to any watercourse in relation to this change and there are no watercourses in the immediate vicinity. With the mitigation measures outlined in relation to the water environment in the ES, notably best practice measures in the CEMP and Water Management Plan, no change to the impacts presented in the ES Chapter 9 is anticipated to</p>

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 2 – Work No. 2B
9C WFD Assessment [APP-254]		<p>surface or groundwater quality, hydromorphology or groundwater flows or water resources. Similarly, no change in the outcomes of the WFD assessment are anticipated.</p> <p>This area is located on land considered to be at low risk of flooding from fluvial and tidal sources and surface water. Any construction will take place within the previously assessed parameters and work areas. Provided that all mitigation measures outlined in relation to flood risk in the Flood Risk Assessment (FRA) and the ES are adopted, including best practice measures in the CEMP, no likely significant effects are anticipated from flood risk sources. Therefore, there will be no change to the flood risks reported in the FRA.</p>
<p>Chapter 10 Geology and Contaminated Land [APP-092]</p> <p>10A Preliminary Sources Study Report [APP-255 to APP-292]</p> <p>10B Contaminated Land-Conceptual Site Model [APP-293]</p> <p>10C Contaminated Land Environmental Risk Assessment [APP-294]</p> <p>10D Geotechnical Risk Register [APP-295]</p>	Out	<p>Proposed Development Change 2 does not have the potential to change the conclusions of the geology and contaminated land assessment carried out within the Original ES (as amended).</p> <p>The changes to the AGI area are within the existing Order Limits which were assessed for geology, hydrogeology and contaminated land. The Original ES (as amended) made reasonable worst case assumptions for pipeline construction in this area. Change 2 does not alter the existing reasonable worst case scenario assessment for construction in this area. Therefore, there are no changes to the likely significant effects reported for construction, operation and decommissioning.</p>
Chapter 11 Noise and Vibration [APP-093]	Out	Proposed Development Change 2 does not have the potential to change the conclusions of the noise and vibration assessment carried out within the Original ES (as amended).

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 2 – Work No. 2B
<p>11A Construction Noise Assessment Methodology [APP-296]</p> <p>11B Operational Noise Information [APP-297]</p>		<p>The Original ES (as amended) assessment made reasonable worst case assumptions for construction in this area. The minor expansion of the proposed AGI area of approximately 770 m² does not exceed the reasonable worst-case assumptions made in the Original ES (as amended) as the location of the AGI in Seal Sands is located approximately 1.75 km from the closest Noise Sensitive Receptor (NSR) (NSR 8, assessed as medium sensitivity), as shown in Figure 11-1 of the DCO Non-Material Change ES Addendum Volume II (Document Ref. 6.7b). The study area for the Site Boundary is 800 m. As the NSR is located far from the Proposed Development Change, there is no change to the effects reported in the Original ES (as amended).</p>
<p>Chapter 12 Terrestrial Ecology [APP-094]</p> <p>12A Legislation and Planning Policy Relevant to Ecology [APP-298]</p> <p>12B Ecological Impact Assessment Methods [APP-299]</p> <p>12C Preliminary Ecological Appraisal [APP-300 to APP-304]</p> <p>12D Bat Survey Report [APP-305 to APP-306]</p>	<p>Out</p>	<p>Proposed Development Change 2 does not have the potential to change the conclusions of the terrestrial ecology assessment carried out within the Original ES (as amended).</p> <p>The proposed works represent a small increase in the footprint of the AGI area. This will not bring in any new ecological constraints that were not considered as part of the ecological assessment reported at Chapter 12 of the ES.</p> <p>The habitats present, as recently re-verified and updated by the applicant for the H2Teesside Project (PINS Application Document APP-201), are semi-improved neutral grassland and hardstanding. As such, there will be no disturbance or loss of priority habitats as a result of construction.</p> <p>The habitats present are not subject to any nature conservation designations, and no species are likely to occur that were not assessed previously in the ES in relation to works on adjacent land within the existing Order Limits.</p> <p>No works of sufficient extent, duration or magnitude are proposed that they will materially add to the parameters assessed previously, and consequently no likely significant effects are</p>

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 2 – Work No. 2B
<p>12E Reptile Survey Report [APP-307]</p> <p>12F Terrestrial Invertebrate Survey Report [APP-308]</p> <p>12G Water Vole and Otter Survey Report [APP-309]</p> <p>12H Supplementary Habitat Information Report Coatham Sands [APP-310 to APP-311]</p> <p>12I Terrestrial Invertebrate Survey Coatham Dunes [APP-312]</p> <p>12J GCN Report [APP-313]</p>		<p>predicted. The small area of additional habitat disturbance and loss is not (after application of the existing committed mitigation) likely to impact the nature conservation status of any relevant species or result in likely significant effects (i.e. any impact that occurs would be at a local/site scale only and would not result in adverse likely significant effects).</p> <p>The previously agreed ecological mitigation therefore remains suitable and will apply to the proposed activities.</p>
<p>Chapter 13 Aquatic Ecology [APP-095]</p> <p>13A Aquatic Ecology Supplementary Desk Study and Field Survey Report [APP-314]</p>	Out	<p>Proposed Development Change 2 does not have the potential to change the conclusions of the aquatic ecology assessment carried out within the Original ES (as amended).</p> <p>No waterbodies will be directly or indirectly affected during construction, operation and decommissioning, so there are no pathways for impacts on aquatic ecology.</p>
<p>Chapter 14 Marine Ecology [APP-096]</p>	Out	<p>Proposed Development Change 2 does not have the potential to change the conclusions of the marine ecology assessment carried out within the Original ES (as amended).</p>

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 2 – Work No. 2B
<p>14A Intertidal Benthic Ecology Survey Report [APP-315]</p> <p>14B Fisheries and Fish Ecology Baseline [APP-316 to APP-318]</p> <p>14C Marine Mammal Baseline [APP-319]</p> <p>14D Subtidal Benthic Ecology [APP-320]</p> <p>14E Coastal Modelling Report [APP-321]</p>		<p>The proposed works represent a small increase in the footprint of the AGI area (Work no. 2B). However, these works still fall within the worst case assessment of airborne noise for that location. Therefore, the assessment of likely significant effects to seals and other marine receptors, remains the same.</p> <p>There are no pathways for impacts on marine ecology.</p>
<p>Chapter 15 Ornithology [APP-097]</p> <p>15A Ornithology Baseline [APP-322 to APP-325]</p> <p>15B CONFIDENTIAL Ornithology Baseline [APP-326]</p>	Out	<p>Proposed Development Change 2 does not have the potential to change the conclusions of the ornithology assessment carried out within the Original ES (as amended).</p> <p>The location of the AGI and its immediate environs was scoped out of bird surveys on the basis that it supported sub-optimal habitats for breeding and non-breeding birds due to the limited extent of semi-natural habitat bordered by existing industrial and transport infrastructure.</p> <p>The extended AGI area will not result in any changes to the ecological effects reported, provided all best-practice construction mitigation measures proposed in the CEMP submitted as part of the NZT DCO application (measures to reduce habitat clearance/disturbance, dust, noise and emissions to ground and surface waters; and pre construction habitat checks for</p>

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 2 – Work No. 2B
		breeding birds) are followed.
Chapter 16 Traffic [APP-098] 16A Transportation Assessment [APP-327 to APP-332] 16B Framework Construction Worker Travel Plan [APP-333] 16C Framework Traffic Management Plan [APP-334]	Out	<p>Proposed Development Change 2 does not have the potential to change the conclusions of the traffic and transportation assessment carried out within the Original ES (as amended).</p> <p>The extension of the AGI area will not change the level of construction traffic during the peak month of construction (i.e. the reasonable worst case scenario), as assessed in the ES.</p> <p>Furthermore the magnitude of the impact on the roads to the north of the River Tees as predicted in the ES is a maximum of 13.3% on Belasis Avenue (Table 16-15). This is well below the 30% increase threshold as set out in the IEMA Guidelines above which a link should be included (the increase of above 10% in sensitive areas rule does not apply in this case as Belasis Ave has a low sensitivity (rationale provided in Table 16-1 of Chapter 16: Traffic and Transport within the Original ES (as amended)(Document Ref.6.2)).</p> <p>Therefore, the proposed AGI extension is not considered to change any of the conclusions as set out in the ES.</p>
Chapter 17 Landscape and Visual Amenity [APP-099] 17A Landscape Character [APP-335] 17B LVIA Proposed Methodology [APP-336] 17C Potential Viewpoints [APP-337]	Out	<p>Proposed Development Change 2 does not have the potential to change the conclusions of the landscape and visual amenity assessment carried out within the Original ES (as amended).</p> <p>Construction will take place within the existing Order Limits and within the previously assessed parameters, but extend slightly outside the existing Work No. 2B area. Therefore construction will take place within previously assessed work areas. The change does not alter the impacts on landscape and visual amenity from those previously assessed within the Original ES (as amended). The proposed works would be undertaken within an area characterised by industrial structures. There will be no increase to the likely significant effects reported in the Original ES (as amended).</p>
Chapter 18 Cultural Heritage	Out	Proposed Development Change 2 does not have the potential to change the conclusions of

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 2 – Work No. 2B
<p>[APP-100]</p> <p>18A Cultural Heritage Baseline Report [APP-338]</p> <p>18B Cultural Heritage Gazetteer [APP-339]</p>		<p>the cultural heritage assessment carried out within the Original ES (as amended).</p> <p>Any construction will take place within the existing Order Limits and within the previously assessed parameters, but extend slightly outside the existing Work No. 2B area. Therefore construction will take place within previously assessed work areas. No archaeological remains are anticipated in this area of land reclamation and no designated or non-designated assets are situated in proximity. Therefore, there will be no change to the likely significant effects reported in the Original ES (as amended).</p>
<p>Chapter 19 Marine Heritage [APP-101]</p>	<p>Out</p>	<p>Proposed Development Change 2 does not have the potential to change the conclusions of the marine heritage assessment carried out within the Original ES (as amended).</p> <p>Construction will take place within the existing Order Limits and within the previously assessed parameters, but extend slightly outside the existing Work No. 2B area. Therefore construction will take place within previously assessed work areas. No marine heritage is anticipated in this area and no designated or non-designated assets are situated in proximity.</p> <p>The Proposed Development Change does not have an interaction with the assessment area for potential impacts to marine heritage assets that was agreed for the Original ES (as amended), which entails a 1 km study area below Mean High Water Springs. Therefore, there will be no change to the likely significant effects reported in the Original ES (as amended).</p>
<p>Chapter 20 Socio-Economics [APP-102]</p> <p>20A Economics Benefits Report [APP-340]</p> <p>20B- Navigational Risk Assessment [APP-341 to</p>	<p>Out</p>	<p>Proposed Development Change 2 does not have the potential to change the conclusions of the socio-economics assessment carried out within the Original ES (as amended).</p> <p>The extended AGI area is not expected to result in any material changes for the socio-economic receptors reviewed. The works are not expected to result in any employment receptor impacts and are unlikely to change the levels of disruption for local receptors noted in the ES.</p>

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**Rationale - potential for the environmental likely significant effects to be altered as a
result of Proposed Development Change 2 – Work No. 2B**

APP-343]		
<p>Chapter 21 Climate Change [APP-103], as amended by Cumulative Onshore and Offshore GHG Assessment [REP6-123]</p>	<p>Out</p>	<p>Proposed Development Change 2 does not have the potential to change the information presented to the Secretary of State for the greenhouse gas (GHG) emissions assessment, as set out within the Original ES (as amended).</p> <p>The original GHG assessment for the construction phase was carried out on the basis of outline design data. Construction emissions largely comprised the embodied carbon in materials and components, with this data being estimated based on building footprint areas, which was and remains appropriate and proportionate given the nature and magnitude of construction emissions in the context of overall lifecycle emissions for the Proposed Development. The quantitative estimate of construction phase emissions took place within the context of a Rochdale Envelope approach to present a reasonable worst-case assessment, as described in Section 21.3.10 of Chapter 21 Climate Change of the Original ES (as amended). A full breakdown of construction phase emissions is provided in Table 21-9 of Chapter 21 Climate Change of the Original ES (as amended) [APP-103] together with the description of methodology and assumptions made. It is also important to note that construction emissions account for less than 0.5% of the total emissions for the Proposed Development when all direct and indirect emissions (including upstream well to tank emissions from the fuel supply chain) are taken into account.</p> <p>The methodology outlined above is consistent with established guidance and best practice, and is based on an outline design approach that is not altered by the granularity of the Proposed Development Changes. Accordingly, the Proposed Development Changes will not alter the construction phase emissions figure that is presented in the Original ES (as amended). Accordingly, the information provided to the Secretary of State for the assessment of GHG emissions for the Proposed Development Changes remains the same as the information presented in the Original ES (as amended), as was assessed by the Secretary of</p>

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 2 – Work No. 2B
		State in granting development consent for the Consented Development ⁵ .
Chapter 22 Major Accidents and Disasters [APP-104]	Out	<p>Proposed Development Change 2 does not have the potential to change the conclusions of the major accidents and disasters assessment carried out within the Original ES (as amended).</p> <p>Any potential hazards that may be presented by the Proposed Development Changes have already been assessed within the Original ES (as amended). The Proposed Development Changes are small-scale and the works are very similar to those assessed within the Original ES (as amended). As such no likely significant effects are anticipated to occur as a result of the Proposed Development Change.</p>
Chapter 23 Public Health [APP-105]	Out	<p>Proposed Development Change 2 does not have the potential to change the conclusions of the public health assessment carried out within the Original ES (as amended).</p> <p>Due to the small-scale nature of the Proposed Development Changes in relation to the Proposed Development and distance to human health receptors, there will be no likely significant effects above and beyond the Original ES (as amended) as a result of the works.</p>
Chapter 24 Cumulative and Combined Effects [APP-106] 24A Planned Development and Development Allocations [APP-344] 24B Assessment of Cumulative Effects Stages 1-3	Out	<p>Proposed Development Change 2 does not have the potential to change the conclusions of the cumulative and combined effects assessment carried out within the Original ES (as amended).</p> <p>The AGI extension will not materially affect the ZOI, magnitude of predicted impacts, relative significance of likely effects or required mitigation measures associated with the Proposed Development. The works will not result in any change to the cumulative and/ or combined impacts/ effects previously assessed.</p>

⁵ https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010103/EN010103-002914-Decision%20Letter_Net%20Zero%20Teesside%20Project.pdf

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 2 – Work No. 2B
[APP-345] 24C Statement of Combined Effects [APP-346]		For further detail, please refer to Section 5.
Chapter 25 Summary of Significant Effects [APP-107]	Out	As the updated assessment of all of the above topics have confirmed that Proposed Development Change 2 will not result in any change to the summary of significant effects previously assessed in the Original ES (as amended), this chapter is not affected.
Habitats Regulations Assessment (HRA) (Document Ref. 5.13 Rev. 7.0)	Out	Proposed Development Change 2 does not have the potential to change the conclusions of the original assessment. Further detail is provided within the HRA Addendum (Document ref 5.13a) provided within this DCO Non-material Change Application.

Table 4-3: Summary of Potential Changes in Likely Significant Environmental Effects for Change 3 – Work No. 6 (PCC CO₂ Gathering Network Realignment) & Work No 6A (PCC Site CO₂ AGI)

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 3 – Work No. 6 / 6A (PCC)
Chapter 8 Air Quality [APP-090] 8A Air Quality - Construction Phase [APP-247] 8B Air Quality - Operation Phase [APP-248] 8C Air Quality - Amine Degradation Assessment [APP-249]	Out	<p>Proposed Development Change 3 does not have the potential to change the conclusions of the air quality assessment carried out within the Original ES (as amended).</p> <p>Construction phase emissions of dust associated with the proposed works (pipeline realignment and AGI) will be similar to those assessed for the consented development in terms of potential magnitude, frequency and the proximity of sensitive receptors. The proposed works are within the previously assessed Works Nos. areas, and dust emissions can be adequately controlled by the good practice measures secured in the DCO. There is no predicted change in operational emissions.</p> <p>There will therefore be no change to the likely significant effects reported within the Original ES (as amended).</p>
Chapter 9 Surface Water, Flood Risk and Water Resources [APP-091] 9A Flood Risk Assessment [APP-250 to APP-252] 9B Background Water Quality [APP-253] 9C WFD Assessment [APP-254]	Out	<p>Proposed Development Change 3 does not have the potential to change the conclusions of the surface water, flood risk and water resources assessment carried out within the Original ES (as amended).</p> <p>The proposed works are within the existing Order Limits, and within the previously assessed Works Nos. areas. No direct works are required to any watercourse in relation to the altered works, and there are no watercourses in the immediate vicinity of them. Appropriate drainage will be provided for the AGI within the detailed drainage strategy and in keeping with the Drainage Philosophy (ES Volume III, Appendix E, Document Ref 6.4) as assessed within the ES. As such, provided that all mitigation measures outlined in relation to the water environment in the ES are adopted, notably best practice measures in the CEMP and Water Management Plan, then no change to the impacts presented in the ES Chapter 9 are</p>

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**Rationale - potential for the environmental likely significant effects to be altered as a
result of Proposed Development Change 3 – Work No. 6 / 6A (PCC)**

		<p>anticipated to surface or groundwater quality, hydromorphology or groundwater flows or water resources. Similarly, no change in the outcomes of the WFD Assessment are anticipated.</p> <p>The area in question is located on land located in Flood Zone 1 and therefore at low risk of flooding from fluvial and tidal sources. The risk of flooding from surface water in this location is also considered to be low. Any construction will take place within the consented parameters and therefore within previously assessed Work Nos. areas. Provided that all mitigation measures outlined in relation to flood risk in the FRA and the ES are adopted, including best practice measures in the CEMP, then no adverse impacts are anticipated to or from flood risk sources. Therefore, there will be no change to the flood risks reported in the FRA.</p>
<p>Chapter 10 Geology and Contaminated Land [APP-092]</p> <p>10A Preliminary Sources Study Report [APP-255 to APP-292]</p> <p>10B Contaminated Land-Conceptual Site Model [APP-293]</p> <p>10C Contaminated Land Environmental Risk Assessment [APP-294]</p> <p>10D Geotechnical Risk Register [APP-295]</p>	Out	<p>Proposed Development Change 3 does not have the potential to change the conclusions of the geology and contaminated land assessment carried out within the Original ES (as amended).</p> <p>The proposed works are within the existing Order Limits, which were assessed for geology, hydrogeology and contaminated land. Therefore, there are no changes to the effects reported for construction, operation and decommissioning.</p>

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 3 – Work No. 6 / 6A (PCC)
<p>Chapter 11 Noise and Vibration [APP-093]</p> <p>11A Construction Noise Assessment Methodology [APP-296]</p> <p>11B Operational Noise Information [APP-297]</p>	Out	<p>Proposed Development Change 3 does not have the potential to change the conclusions of the noise and vibration assessment carried out within the Original ES (as amended).</p> <p>The CO₂ pipeline construction has been assessed based on the closest distance for the corridor and receptors, this remains unchanged as a result of the Proposed Development Change therefore there is no change to the effects reported in the Original ES (as amended).</p>
<p>Chapter 12 Terrestrial Ecology [APP-094]</p> <p>12A Legislation and Planning Policy Relevant to Ecology [APP-298]</p> <p>12B Ecological Impact Assessment Methods [APP-299]</p> <p>12C Preliminary Ecological Appraisal [APP-300 to APP-304]</p> <p>12D Bat Survey Report [APP-305 to APP-306]</p>	Out	<p>Proposed Development Change 3 does not have the potential to change the conclusions of the terrestrial ecology assessment carried out within the Original ES (as amended).</p> <p>This change does not introduce any new terrestrial ecology receptors or alter the potential impacts on ecology from those previously assessed. Therefore, there is no change to the likely significant effects previously reported in the Original HRA (as amended). The previously agreed ecological mitigation remains suitable and will apply to the proposed works.</p>

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Screening Decision Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 3 – Work No. 6 / 6A (PCC)

<p>12E Reptile Survey Report [APP-307]</p> <p>12F Terrestrial Invertebrate Survey Report [APP-308]</p> <p>12G Water Vole and Otter Survey Report [APP-309]</p> <p>12H Supplementary Habitat Information Report Coatham Sands [APP-310 to APP-311]</p> <p>12I Terrestrial Invertebrate Survey Coatham Dunes [APP-312]</p> <p>12J GCN Report [APP-313]</p>		
<p>Chapter 13 Aquatic Ecology [APP-095]</p> <p>13A Aquatic Ecology Supplementary Desk Study and Field Survey Report [APP-314]</p>	Out	<p>Proposed Development Change 3 does not have the potential to change the conclusions of the aquatic ecology assessment carried out within the Original ES (as amended).</p> <p>No waterbodies will be directly or indirectly affected during construction, operation and decommissioning, so there are no pathways for an impact on aquatic ecology.</p>
<p>Chapter 14 Marine Ecology [APP-096]</p>	Out	<p>Proposed Development Change 3 does not have the potential to change the conclusions of the marine ecology assessment carried out within the Original ES (as amended).</p>

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Screening Decision Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 3 – Work No. 6 / 6A (PCC)

<p>14A Intertidal Benthic Ecology Survey Report [APP-315]</p> <p>14B Fisheries and Fish Ecology Baseline [APP-316 to APP-318]</p> <p>14C Marine Mammal Baseline [APP-319]</p> <p>14D Subtidal Benthic Ecology [APP-320]</p> <p>14E Coastal Modelling Report [APP-321]</p>		<p>The areas of the proposed works do not fall within the marine environment and will not result in likely significant effects to any waterbodies.</p> <p>Any changes in airborne sound are considered to be negligible, the location of the works being over 4 km from Seal Sands, where seals are known to haul-out and moult.</p>
<p>Chapter 15 Ornithology [APP-097]</p> <p>15A Ornithology Baseline [APP-322 to APP-325]</p> <p>15B CONFIDENTIAL Ornithology Baseline [APP-326]</p>	<p>Out</p>	<p>Proposed Development Change 3 does not have the potential to change the conclusions of the ornithology assessment carried out within the Original ES (as amended).</p> <p>The proposed works do not alter the potential pathways for impacts on birds from those previously assessed, or introduce any new bird species that were not considered previously. Therefore, there is no change to the effects reported. The previously agreed ecological mitigation remains suitable and will apply to the works.</p>
<p>Chapter 16 Traffic [APP-098]</p>	<p>Out</p>	<p>Proposed Development Change 3 does not have the potential to change the conclusions of the traffic and transportation assessment carried out within the Original ES (as amended).</p>

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 3 – Work No. 6 / 6A (PCC)
<p>16A Transportation Assessment [APP-327 to APP-332]</p> <p>16B Framework Construction Worker Travel Plan [APP-333]</p> <p>16C Framework Traffic Management Plan [APP-334]</p>		<p>The proposed works are not predicted to result in any additional construction vehicle trips, nor will they change the peak month of construction that has been assessed within ES Chapter 16 (i.e. the reasonable worst case scenario assessed in the Original ES (as amended)). Therefore there are no new or altered likely significant effects arising out of the Proposed Development Change compared to the Original ES (as amended).</p>
<p>Chapter 17 Landscape and Visual Amenity [APP-099]</p> <p>17A Landscape Character [APP-335]</p> <p>17B LVIA Proposed Methodology [APP-336]</p> <p>17C Potential Viewpoints [APP-337]</p>	<p>Out</p>	<p>Proposed Development Change 3 does not have the potential to change the conclusions of the landscape and visual amenity assessment carried out within the Original ES (as amended).</p> <p>The proposed works do not alter the impacts on landscape and visual amenity from those previously assessed within the ES. The works will be undertaken within an area characterised by industrial structures and are likely to result in negligible to minor effects on landscape character and visual amenity. There will be no increase to the likely significant effects reported in the ES.</p>
<p>Chapter 18 Cultural Heritage [APP-100]</p> <p>18A Cultural Heritage Baseline Report [APP-338]</p> <p>18B Cultural Heritage Gazetteer [APP-339]</p>	<p>Out</p>	<p>Proposed Development Change 3 does not have the potential to change the conclusions of the cultural heritage assessment carried out within the Original ES (as amended).</p> <p>Any construction will take place within the consented parameters and therefore within previously assessed Work Nos. areas. No archaeological remains are anticipated in this area of extensive historic ground disturbance and no designated assets are situated in proximity. There will be no change to the effects reported in the Original ES (as amended).</p>

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 3 – Work No. 6 / 6A (PCC)
Chapter 19 Marine Heritage [APP-101]	Out	<p>Proposed Development Change 3 does not have the potential to change the conclusions of the marine heritage assessment carried out within the Original ES (as amended).</p> <p>The Proposed Development Changes do not have an interaction with the assessment area for potential impacts to marine heritage assets that was agreed for the Original ES (as amended), which entails a 1 km study area below Mean High Water Springs. As such, there will be no impacts to known or previously unrecorded marine heritage assets.</p>
Chapter 20 Socio-Economics [APP-102] 20A Economics Benefits Report [APP-340] 20B- Navigational Risk Assessment [APP-341 to APP-343]	Out	<p>Proposed Development Change 3 does not have the potential to change the conclusions of this socio-economics assessment and associated appendices as set out in the Original ES (as amended).</p> <p>The proposed works will not result in any change to the socio-economic effects reported in the Original ES (as amended), as the construction works do not affect any new socio-economic receptors that have not already been considered in the original assessment. As a result, there will be no change to the conclusions of the Original ES (as amended).</p>
Chapter 21 Climate Change [APP-103], as amended by Cumulative Onshore and Offshore GHG Assessment [REP6-123]	Out	<p>Proposed Development Change 3 does not have the potential to change the information presented to the Secretary of State for the greenhouse gas (GHG) emissions assessment, as set out within the Original ES (as amended).</p> <p>The original GHG assessment for the construction phase was carried out on the basis of outline design data. Construction emissions largely comprised the embodied carbon in materials and components, with this data being estimated based on building footprint areas, which was and remains appropriate and proportionate given the nature and magnitude of construction emissions in the context of overall lifecycle emissions for the Proposed Development. The quantitative estimate of construction phase emissions took place within the context of a Rochdale Envelope approach to present a reasonable worst-case assessment, as described in Section 21.3.10 of Chapter 21 Climate Change of the Original ES (as</p>

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 3 – Work No. 6 / 6A (PCC)
		<p>amended). A full breakdown of construction phase emissions is provided in Table 21-9 of Chapter 21 Climate Change of the Original ES (as amended) [APP-103] together with the description of methodology and assumptions made. It is also important to note that construction emissions account for less than 0.5% of the total emissions for the Proposed Development when all direct and indirect emissions (including upstream well to tank emissions from the fuel supply chain) are taken into account.</p> <p>The methodology outlined above is consistent with established guidance and best practice, and is based on an outline design approach that is not altered by the granularity of the Proposed Development Changes. Accordingly, the Proposed Development Changes will not alter the construction phase emissions figure that is presented in the Original ES (as amended). Accordingly, the information provided to the Secretary of State for the assessment of GHG emissions for the Proposed Development Changes remains the same as the information presented in the Original ES (as amended), as was assessed by the Secretary of State in granting development consent for the Consented Development⁶.</p>
Chapter 22 Major Accidents and Disasters [APP-104]	Out	<p>Proposed Development Change 3 does not have the potential to change the conclusions of the major accidents and disasters assessment carried out within the Original ES (as amended).</p> <p>Any potential hazards that may be presented by the Proposed Development Changes have already been assessed within the Original ES (as amended). The Proposed Development Changes are small-scale and the works are very similar to those assessed within the Original ES (as amended). As such no likely significant effects are anticipated to occur as a result of the Proposed Development Change.</p>

⁶ https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010103/EN010103-002914-Decision%20Letter_Net%20Zero%20Teesside%20Project.pdf

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 3 – Work No. 6 / 6A (PCC)
Chapter 23 Public Health [APP-105]	Out	<p>Proposed Development Change 3 does not have the potential to change the conclusions of the public health assessment carried out within the Original ES (as amended).</p> <p>Due to the small-scale nature of the Proposed Development Changes in relation to the Proposed Development and distance to human health receptors, there will be no likely significant effects above and beyond the Original ES (as amended) as a result of the works .</p>
Chapter 24 Cumulative and Combined Effects [APP-106] 24A Planned Development and Development Allocations [APP-344] 24B Assessment of Cumulative Effects Stages 1-3 [APP-345] 24C Statement of Combined Effects [APP-346]	Out	<p>Proposed Development Change 3 does not have the potential to change the conclusions of the cumulative and combined effects assessment carried out within the Original ES (as amended).</p> <p>The proposed works will not materially affect the ZOI, magnitude of predicted impacts, relative significance of likely effects or required mitigation measures associated with the Proposed Development. The works will not result in any change to the cumulative and/ or combined impacts/ effects previously assessed.</p> <p>For further detail, please refer to Section 5.</p>
Chapter 25 Summary of Significant Effects [APP-107]	Out	As the updated assessment of all of the above topics have confirmed that Proposed Development Change 3 will not result in any change to the in the summary of significant effects previously assessed in the Original ES (as amended), this chapter is not affected.
Habitats Regulations Assessment (HRA) (Document Ref. 5.13 Rev. 7.0)	Out	Proposed Development Change 3 does not have the potential to change the conclusions of the original assessment. Further detail is provided within the HRA Addendum (Document ref 5.13a) provided within this DCO Non-material Change Application.

Table 4-4: Summary of Potential Changes in Likely Significant Environmental Effects for Change 4 – Work No. 3A (Additional HV cabling areas)

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 4 – Work No. 3A
Chapter 8 Air Quality [APP-090] 8A Air Quality - Construction Phase [APP-247] 8B Air Quality - Operation Phase [APP-248] 8C Air Quality - Amine Degradation Assessment [APP-249]	Out	<p>Proposed Development Change 4 does not have the potential to change the conclusions of the air quality assessment carried out within the Original ES (as amended).</p> <p>Construction phase emissions of dust will be similar to those assessed in the Original ES (as amended) in terms of potential magnitude, frequency and the proximity of sensitive receptors. Dust emissions can be adequately controlled by currently secured good practice measures. There is no predicted change in operational emissions.</p> <p>There will therefore be no change to the likely significant effects reported within the Original ES (as amended).</p>
Chapter 9 Surface Water, Flood Risk and Water Resources [APP-091] 9A Flood Risk Assessment [APP-250 to APP-252] 9B Background Water Quality [APP-253] 9C WFD Assessment [APP-254]	Out	<p>Proposed Development Change 4 does not have the potential to change the conclusions of the surface water, flood risk and water resources assessment carried out within the Original ES (as amended).</p> <p>The changes to the Order Limits for the HV cable routes are minor and within the study area originally assessed. The proposed works will require works over a culvert of the Mill Race watercourse and a new cable support structure over the Fleet watercourse (also known as Tees Estuary (South Bank) WFD waterbody), which enters a culvert in close proximity to the proposed South Transition Span of Bridge B6. No direct works are required to either watercourse and as such there is no change to the assessment presented in ES Chapter 9 in terms of impacts to surface water quality and hydromorphology.</p>

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result of Proposed Development Change 4 – Work No. 3A**

		<p>There is a construction compound proposed for Bridge B6 between the wingwalls of the existing bridge, and although exact location details are not known this may be in relatively close proximity to the Fleet watercourse. All requirements outlined in the CEMP and Water Management Plan regarding suitable buffers from watercourses and measures to control site runoff and spillage risk will be implemented in full as secured in the Order (Requirement 16).</p> <p>Piling is required for the Bridge B6 towers with an indicative depth of 18 m. Piling may also be required for Bridge B19 although details are not currently available. As outlined in the ES, any piling operations required will be subject to a works risk assessment and any potential to cause pollution to the underlying groundwater aquifer will be covered by measures to be detailed in piling method statements (secured by the Order Requirements 16 and 23).</p> <p>As such, provided that all mitigation measures outlined in relation to the water environment in the ES are adopted, notably best practice measures in the CEMP and Water Management Plan, then no change to the impacts presented in the ES Chapter 9 is anticipated to surface or groundwater quality, hydromorphology or groundwater flows or water resources. Similarly, no change in the outcomes of the WFD assessment is anticipated.</p> <p>With regard to flood risk, no works of sufficient extent, duration or magnitude are proposed that will materially change the previous assessment of flood risk, and consequently no likely significant effects are predicted.</p>
<p>Chapter 10 Geology and Contaminated Land [APP-092]</p> <p>10A Preliminary Sources Study Report [APP-255 to APP-292]</p>	Out	<p>Proposed Development Change 4 does not have the potential to change the conclusions of the geology and contaminated land assessment carried out within the Original ES (as amended).</p> <p>The changes to the Order Limits are minor and within the study area originally assessed. Therefore, the geological hydrogeological and contaminated land setting of this area has also already been assessed.</p>

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 4 – Work No. 3A
<p>10B Contaminated Land-Conceptual Site Model [APP-293]</p> <p>10C Contaminated Land Environmental Risk Assessment [APP-294]</p> <p>10D Geotechnical Risk Register [APP-295]</p>		<p>The assessment of the distance to geology, soils and mineral receptors was 500 m and the distance to hydrogeological receptors was 1 km. The effects were considered Neutral or Slight (adverse) and these changes to the Order Limits are not expected to change the assessment of likely significant effects.</p>
<p>Chapter 11 Noise and Vibration [APP-093]</p> <p>11A Construction Noise Assessment Methodology [APP-296]</p> <p>11B Operational Noise Information [APP-297]</p>	Out	<p>Proposed Development Change 4 does not have the potential to change the conclusions of the noise and vibration assessment carried out within the Original ES (as amended).</p> <p>The changes to the Order Limits will bring the electrical connection works to within 485 m of residential receptors at Dormanstown. Given that the works will only be 15 m closer to these receptors than previously assessed (the distance was previously 500 m) and the effects of construction noise due to the construction of the electrical connection were assessed as negligible, it is not considered that there will be any change to the previously reported likely significant effects at these receptors.</p>
<p>Chapter 12 Terrestrial Ecology [APP-094]</p> <p>12A Legislation and Planning Policy Relevant to Ecology [APP-298]</p>	Out	<p>Proposed Development Change 4 does not have the potential to change the conclusions of the terrestrial ecology assessment carried out within the Original ES (as amended).</p> <p>Minor changes are required to the Order Limits but this does not bring in any new ecological receptors or sites to those that have already been assessed within the ecological assessment reported in ES Chapter 12.</p> <p>The habitats present are semi-improved neutral grassland and bare ground, so there will be no disturbance or loss of priority habitats for construction.</p>

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result of Proposed Development Change 4 – Work No. 3A**

<p>12B Ecological Impact Assessment Methods [APP-299]</p> <p>12C Preliminary Ecological Appraisal [APP-300 to APP-304]</p> <p>12D Bat Survey Report [APP-305 to APP-306]</p> <p>12E Reptile Survey Report [APP-307]</p> <p>12F Terrestrial Invertebrate Survey Report [APP-308]</p> <p>12G Water Vole and Otter Survey Report [APP-309]</p> <p>12H Supplementary Habitat Information Report Coatham Sands [APP-310 to APP-311]</p> <p>12I Terrestrial Invertebrate Survey Coatham Dunes [APP-312]</p>		<p>The habitats present are not subject to any nature conservation designations, and no species are likely to occur that were not assessed previously in the ES in relation to works on adjacent land within the Order Limits.</p> <p>No works of sufficient extent, duration or magnitude are proposed that would materially add to the parameters or Works Nos. areas assessed previously, and consequently no likely significant effects are predicted. The small area of additional habitat disturbance (after application of the existing committed mitigation) is not likely to impact the nature conservation status of any relevant species or result in likely significant effects (i.e. any impact that occurs will be meaningful at the local/site scale only).</p> <p>The ecological mitigation as consented in the Order therefore remains suitable and will apply to the proposed works.</p>
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ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 4 – Work No. 3A
12J GCN Report [APP-313]		
Chapter 13 Aquatic Ecology [APP-095]	Out	Proposed Development Change 4 does not have the potential to change the conclusions of the aquatic ecology assessment carried out within the Original ES (as amended).
13A Aquatic Ecology Supplementary Desk Study and Field Survey Report [APP-314]		<p>No waterbodies will be directly or indirectly affected during construction, operation and decommissioning and there are no pathways for impacts on aquatic ecology.</p> <p>With the mitigation measures outlined in relation to the water environment in the ES, notably best practice measures in the CEMP and Water Management Plan secured through the DCO, then no adverse impact would be anticipated to aquatic ecology. There will be no change to the likely significant effects reported in the Original ES (as amended).</p>
Chapter 14 Marine Ecology [APP-096]	Out	Proposed Development Change 4 does not have the potential to change the conclusions of the marine ecology assessment carried out within the Original ES (as amended).
14A Intertidal Benthic Ecology Survey Report [APP-315]		The changes to the Order Limits do not fall within the marine environment and will not therefore result in likely significant effects to any waterbodies.
14B Fisheries and Fish Ecology Baseline [APP-316 to APP-318]		Any changes in airborne sound are considered to be negligible, the location of the proposed works being over 4 km from Seal Sands, where seals are known to haul-out and moult.
14C Marine Mammal Baseline [APP-319]		Therefore, during construction, operation and decommissioning, there are considered to be no pathways for impacts on marine ecology due to the proposed HV cable works.
14D Subtidal Benthic Ecology [APP-320]		

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 4 – Work No. 3A
14E Coastal Modelling Report [APP-321]		
Chapter 15 Ornithology [APP-097] 15A Ornithology Baseline [APP-322 to APP-325] 15B CONFIDENTIAL Ornithology Baseline [APP-326]	Out	<p>Proposed Development Change 4 does not have the potential to change the conclusions of the ornithology assessment carried out within the Original ES (as amended).</p> <p>The proposed works require minor changes to the Order Limits but this does not bring in any new ecological constraints that were not considered within the assessment in Chapter 15 of the ES.</p> <p>The species present include common and widespread breeding species that contribute to a breeding bird assemblage of local value. The extension of the Order Limits will not measurably increase the impacts on breeding birds as it includes only those marginal grassland and bare ground habitats immediately adjacent to an existing access road that are, by virtue of their position in the landscape, suboptimal.</p> <p>There is a known breeding and roosting barn owl (<i>Tyto alba</i>) location within approximately 50 m of the revised Order Limits, however in the context of the Original ES (as amended) and the baseline conditions within the Teesworks site it is not anticipated that this extension to the Order Limits will cause any significantly elevated levels of disturbance to this species and therefore no change to the likely significant effects reported within the Original ES (as amended).</p> <p>The baseline surveys for the Original ES (as amended) identified use of the open habitats to the south-east and east of the proposed working areas by a number of non-breeding wetland birds including lapwing (<i>Vanellus vanellus</i>), shelduck (<i>Tadorna tadorna</i>), teal (<i>Anas crecca</i>) and cormorant (<i>Phalacrocorax carbo</i>). However, subsequent surveys to support the assessment of H2Teesside have shown these species to be absent from this area and it is likely that this was a result of significant earthworks across this part of Teesworks. Therefore,</p>

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 4 – Work No. 3A
		<p>no additional impacts on these species are expected to arise and so there will be no likely significant effects.</p> <p>All of the above conclusions are on the basis of the mitigation secured by the NZT DCO, in particular through Requirements 4 (Landscape and biodiversity protection management and enhancement) and 16 (Construction environmental management plan).</p>
<p>Chapter 16 Traffic [APP-098] 16A Transportation Assessment [APP-327 to APP-332] 16B Framework Construction Worker Travel Plan [APP-333] 16C Framework Traffic Management Plan [APP-334]</p>	<p>Out</p>	<p>Proposed Development Change 4 does not have the potential to change the conclusions of the traffic and transportation assessment carried out within the Original ES (as amended).</p> <p>The Proposed Development Change will not significantly change the vehicle movements assessed within the Original ES (as amended). The works will impact the A1085 Trunk Road to the south of the River Tees. With reference to the Original ES (as amended) the increase in vehicle movements in this location will be between 3 and 5%. The Proposed Development Change is not anticipated to affect this increase in vehicle movements and no new traffic data is required. Therefore, the effects are anticipated to remain the same as reported in the Original ES (as amended).</p>
<p>Chapter 17 Landscape and Visual Amenity [APP-099] 17A Landscape Character [APP-335] 17B LVIA Proposed Methodology [APP-336] 17C Potential Viewpoints [APP-337]</p>	<p>Out</p>	<p>Proposed Development Change 4 does not have the potential to change the conclusions of the landscape and visual amenity assessment carried out within the Original ES (as amended).</p> <p>The changes to the Order Limits are at one location, and the works proposed are minor and within the study area originally assessed. The proposed works will be undertaken within an area characterised by industrial structures and are likely to result in negligible to minor effects on landscape character and visual amenity. There will be no increase to the likely significant effects reported in the Original ES (as amended).</p>

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 4 – Work No. 3A
Chapter 18 Cultural Heritage [APP-100] 18A Cultural Heritage Baseline Report [APP-338] 18B Cultural Heritage Gazetteer [APP-339]	Out	<p>Proposed Development Change 4 does not have the potential to change the conclusions of the cultural heritage assessment carried out within the Original ES (as amended).</p> <p>There are no designated or non-designated assets known in the vicinity of the changes to the Order Limits. The widened HV cable route falls within an area of historically reclaimed land that has been substantially raised above the natural coastal floodplain. Any previously unrecorded non-designated archaeological remains are deeply buried below made ground. Therefore, the widened HV cable route will cause no additional impacts to any cultural heritage assets during construction, operation, or decommissioning.</p>
Chapter 19 Marine Heritage [APP-101]	Out	<p>Proposed Development Change 4 does not have the potential to change the conclusions of the marine heritage assessment carried out within the Original ES (as amended).</p> <p>The Proposed Development Changes do not have an interaction with the assessment area for potential impacts to marine heritage assets that was agreed for the Original ES (as amended), which entails a 1 km study area below Mean High Water Springs. As such, there will be no impacts to known or previously unrecorded marine heritage assets.</p>
Chapter 20 Socio-Economics [APP-102] 20A Economics Benefits Report [APP-340] 20B- Navigational Risk Assessment [APP-341 to APP-343]	Out	<p>Proposed Development Change 4 does not have the potential to change the conclusions of the socio-economics assessment carried out within the Original ES (as amended).</p> <p>The widened HV cable route could cause a slight increase in the number of construction workers required. However, this will be a limited increase in the context of the total construction workforce and will not change the conclusion on likely significant effects as reported in the Original ES (as amended). Therefore, there will be no likely significant effects on socio-economic receptors above and beyond the original assessment as a result of the Proposed Development Change.</p>
Chapter 21 Climate Change [APP-103], as amended by Cumulative Onshore and	Out	<p>Proposed Development Change 4 does not have the potential to change the information presented to the Secretary of State for the greenhouse gas (GHG) emissions assessment, as set out within the Original ES (as amended).</p>

**ES Chapter and ES
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**Screening
Decision**

**Rationale - potential for the environmental likely significant effects to be altered as a
result of Proposed Development Change 4 – Work No. 3A**

<p>Offshore GHG Assessment [REP6-123]</p>	<p>The original GHG assessment for the construction phase was carried out on the basis of outline design data. Construction emissions largely comprised the embodied carbon in materials and components, with this data being estimated based on building footprint areas, which was and remains appropriate and proportionate given the nature and magnitude of construction emissions in the context of overall lifecycle emissions for the Proposed Development. The quantitative estimate of construction phase emissions took place within the context of a Rochdale Envelope approach to present a reasonable worst-case assessment, as described in Section 21.3.10 of Chapter 21 Climate Change of the Original ES (as amended). A full breakdown of construction phase emissions is provided in Table 21-9 of Chapter 21 Climate Change of the Original ES (as amended) [APP-103] together with the description of methodology and assumptions made. It is also important to note that construction emissions account for less than 0.5% of the total emissions for the Proposed Development when all direct and indirect emissions (including upstream well to tank emissions from the fuel supply chain) are taken into account.</p> <p>The methodology outlined above is consistent with established guidance and best practice, and is based on an outline design approach that is not altered by the granularity of the Proposed Development Changes. Accordingly, the Proposed Development Changes will not alter the construction phase emissions figure that is presented in the Original ES (as amended). Accordingly, the information provided to the Secretary of State for the assessment of GHG emissions for the Proposed Development Changes remains the same as the information presented in the Original ES (as amended), as was assessed by the Secretary of State in granting development consent for the Consented Development⁷.</p>
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⁷ https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010103/EN010103-002914-Decision%20Letter_Net%20Zero%20Teesside%20Project.pdf

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 4 – Work No. 3A
Chapter 22 Major Accidents and Disasters [APP-104]	Out	<p>Proposed Development Change 4 does not have the potential to change the conclusions of the major accidents and disasters assessment carried out within the Original ES (as amended).</p> <p>Any potential hazards that may be presented by the Proposed Development Changes have already been assessed within the Original ES (as amended). The Proposed Development Changes are small-scale and the works are very similar to those assessed within the Original ES (as amended). As such no likely significant effects are anticipated to occur as a result of the Proposed Development Change.</p>
Chapter 23 Public Health [APP-105]	Out	<p>Proposed Development Change 2 does not have the potential to change the conclusions of the public health assessment carried out within the Original ES (as amended).</p> <p>Due to the small-scale nature of the Proposed Development Changes in relation to the Proposed Development and distance to human health receptors, there will be no likely significant effects above and beyond the Original ES (as amended) as a result of the works .</p>
Chapter 24 Cumulative and Combined Effects [APP-106] 24A Planned Development and Development Allocations [APP-344] 24B Assessment of Cumulative Effects Stages 1-3 [APP-345] 24C Statement of Combined Effects [APP-346]	Out	<p>Proposed Development Change 4 does not have the potential to change the conclusions of the cumulative and combined effects assessment carried out within the Original ES (as amended).</p> <p>The proposed works will not materially affect the ZOI, magnitude of predicted impacts, relative significance of likely effects or required mitigation measures associated with the Proposed Development. The works will not result in any change to the cumulative and/ or combined impacts/ effects previously assessed.</p> <p>For further detail, please refer to Section 5.</p>

ES Chapter and ES Appendices	Screening Decision	Rationale - potential for the environmental likely significant effects to be altered as a result of Proposed Development Change 4 – Work No. 3A
Chapter 25 Summary of Significant Effects [APP-107]	Out	As the updated assessment of all of the above topics have confirmed that Proposed Development Change 4 will not result in any change to the summary of significant effects previously assessed in the Original ES (as amended), this chapter is not affected.
Habitats Regulations Assessment (HRA) (Document Ref. 5.13 Rev. 7.0)	Out	Proposed Development Change 4 does not have the potential to change the conclusions of the original assessment. Further detail is provided within the HRA Addendum (Document ref 5.13a) provided within this DCO Non-Material Change Application.



5. Cumulative and Combined Assessment of the Proposed Development Changes

5.1 Introduction

5.1.1 This chapter of the DCO Non-Material Change ES Addendum provides an assessment of the potential for cumulative and combined effects to occur as a result of the Proposed Development Changes. In particular, this chapter assesses:

- whether the Proposed Development Changes result in any changes to the conclusions provided within Chapter 24: Cumulative and Combined Effects [APP-106] of the Original ES (as amended) (ES Volume I, Document Ref. 6.2) [APP-081 to APP-347, as amended by AS-019 to AS-033] (hereafter referred to as the 'Original ES (as amended)'; and
- whether the Proposed Development Changes result in any new likely significant cumulative effects with any new other planned projects that have been identified since the Secretary of State's decision to grant the DCO on 16th of February 2024.

5.1.2 Cumulative and combined effects are defined as follows:

- **combined effects:** these are effects resulting from several different impacts from a single development, in this case the Proposed Development, that may collectively cause an effect/ effects of greater significance, on any single environmental receptor. Individually the effects resulting from these impacts may not be significant, but the accumulation of effects may collectively cause an overall significant effect; and
- **cumulative effects:** these occur when the environmental impacts and effects of the Proposed Development interact with those associated with other planned projects and developments located within a given geographical scope where environmental impacts could act together to result in a greater significance of effect on environmental receptors.

5.1.3 This chapter is supported by the following updated ES Figures: Figure 24-1: Zones of Influence of the Original ES (as amended); Figure 24-2: Long List of Other Developments; and Figure 24-3: Short List of Other Developments (ES Volume II, Document Ref. 6.3).

5.2 Legislation and Planning Policy Context

5.2.1 Due to the potential for cumulative effects to occur as a result of the construction and operation (including maintenance) of the Proposed Development, a cumulative assessment was been undertaken as part of the Original ES (as amended) in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ('the EIA



Regulations'), as amended, and the assessment requirements of the Overarching National Policy Statement (NPS) for Energy (EN-1) (DESNZ, November 2023).

5.2.2 The requirement for a cumulative effects assessment is stated in the EIA Regulations as detailed below:

- Schedule 4 Part 5 of the EIA Regulations requires: *"A description of the likely significant effects of the development on the environment resulting from, inter alia [...] (e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources"*. The EIA Regulations state that this description of likely significant effects *"should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development"*;
- Paragraph 4.1.5 of NPS EN-1 (DESNZ, 2023) states that:
"In considering any proposed development, and in particular when weighing its adverse impacts against its benefits, the Secretary of State should take into account:
 - a) *its potential benefits including its contribution to meeting the need for energy infrastructure, job creation, reduction of geographical disparities, environmental enhancements, and any long-term or wider benefits*
 - b) *its potential adverse impacts, including on the environment, and including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce, mitigate or compensate for any adverse impacts, following the mitigation hierarchy"*.
- Paragraph 4.3.3 of NPS EN-1 states that when considering cumulative effects, *"The Regulations require an assessment of the likely significant effects of the proposed project on the environment, covering the direct effects and any indirect, secondary, cumulative, transboundary, short, medium, and long-term, permanent and temporary, positive and negative effects at all stages of the project, and also of the measures envisaged for avoiding or mitigating significant adverse effects."*

5.3 Assessment of Potential Changes to the Cumulative Effects Assessment

5.3.1 This section of the ES Addendum identifies the changes in likely significant effects in the Cumulative Effects Assessment (CEA) within Chapter 24: Cumulative and Combined Effects [APP-106] of the Original ES (as amended) that may arise as a result of the Proposed Development Changes.



5.3.2 Details of the methodology of the previously completed CEA are provided within Chapter 24: Cumulative and Combined Effects of the Original ES (as amended) (ES Volume I, Document Ref. 6.2) **[APP-106]**.

5.3.3 The results of this assessment are presented below in **Table 5-1**.

5.3.4 With regards to Major Accidents and Disasters, Population and Human Health and Climate Change, a cumulative effects assessment has not been undertaken for the reasons set out below.

Major Accidents and Natural Disasters

5.3.5 Major Accidents and Natural Disasters was scoped out of the original CEA as described in the Original ES (as amended). This was due to the implementation of measures described in Chapter 22: Major Accidents and Natural Disasters (MA&NDs), Section 22.9 and Table 22.2 of the Original ES (as amended) (Volume I, Document Ref. 6.2), which concluded that there would be no residual effects as a result of the Proposed Development.

5.3.6 As described in Table 4-1, 4-2, 4-3 and 4-4, the Proposed Development Changes do not have the potential to change the conclusions of MA&NDs assessment carried out within the Original ES (as amended). Therefore, MA&NDs will remain scoped out of this CEA.

Population and Human Health

5.3.7 Population and Human Health (ES Volume I, Document Ref. 6.2) is a summary, highlighting key aspects relevant to population and human health of the technical assessments completed and presented within Chapters: 8: Air Quality, 9: Surface Water, Flood Risk and Water Resources, 10: Geology, Hydrogeology and Contaminated Land, 11: Noise and Vibration, 16: Traffic and Transport, and 20: Socio-economics and Tourism of the Original ES (as amended) (ES Volume I, Document Ref. 6.2). The potential cumulative population and human-health-related effects upon human health would be the same as those assessed within the cumulative assessment for the topics listed above. As these are topics are assessed in Table 5-1 below, these are therefore not reiterated here.

Climate Change

5.3.8 Climate change is the result of cumulative impacts from multiple greenhouse gas emitting activities. The nature of greenhouse gases is such that their impact on receptors (the global climate) is not affected by the location of their source. As stated in IEMA guidance (IEMA 2022), due to this the GHG emission impacts and resulting effects are global rather than affecting one localised area.

5.3.9 The assessment of the likely significant effects of the Consented Development on the climate, as a result of GHG emissions, used the UK's legally binding national carbon budgets and targets as a proxy for the climate. By contextualising the GHG emissions from the Consented Development against these statutory national carbon budgets, the GHG emissions assessment as presented in the Original ES (as amended) **[APP-103]** is inherently a cumulative assessment as it considers whether the



Consented Development would contribute significantly to emissions on a national level.

- 5.3.10 The global atmosphere is the receptor for climate change impacts and has the ability for holding GHG emissions. Nevertheless, as stated by IEMA (IEMA 2022), all GHG emissions are considered significant and therefore would contribute to climate change.
- 5.3.11 The study area, therefore, is the global climate rather than a specific geographically defined location. As noted above, the GHG assessment is inherently cumulative. Consequently, as stated in the IEMA guidance (IEMA 2022), effects of GHG emissions from specific cumulative projects therefore should not be individually assessed, as there is no basis for selecting any particular (or more than one) cumulative project that has GHG emissions for assessment over any other.
- 5.3.12 As explained in Section 4.2 of this Addendum, the Proposed Development Changes do not alter the assessment of GHG emissions as presented in the Original ES (as amended).
- 5.3.13 Accordingly, the information provided to the Secretary of State for the cumulative effects assessment of GHG emissions for the Proposed Development Changes remains the same as the information presented in the Original ES (as amended), as was assessed by the Secretary of State in granting development consent for the Consented Development.
- 5.3.14 An in-combination climate change impacts (ICCI) assessment was carried out for the Consented Development, which considered the extent to which future climate change may affect the potential impacts identified within each of the individual assessments for each of the environmental disciplines. No cumulative impacts were identified during the ICCI assessment. Accordingly, combined impacts from the consented NZT development and Proposed Development Changes and climate impacts are as detailed in Chapter 21: Climate Change (ES Volume 1, Document Ref. 6.2) **[APP-103]**.
- 5.3.15 The Climate Change Resilience (CCR) assessment reported in Chapter 21: Climate Change (ES Volume I, Document Ref. 6.2) **[APP-103]** considers the influence of climate change upon the development. The methodology for the Climate Change Resilience assessment described within Section 21.5 of Chapter 21: Climate Change (ES Volume 1, Document Ref 6.2 **[APP-103]** means that the Proposed Development Changes do not alter the position reported in **[APP-103]** since the Proposed Development Changes do not affect either the likely impacts and effects or the proposed mitigation and enhancement measures.

Table 5-1 Potential Changes to the Combined Effect Assessment as a result of the Proposed Development Changes

ES Chapter	Residual effects after mitigation reported in the Original ES (as amended)	Potential cumulative effects of the Proposed Development Changes	Residual likely significant effects after Proposed Development Changes
Air Quality	No residual likely significant cumulative effects relating to Air Quality	<p>As previously described in Table 4-1, 4-2, 4-3 and 4-4, there will be no change to the likely significant effects for air quality reported within the Original ES (as amended) as a result of the Proposed Development Changes.</p> <p>The cumulative impacts associated with the Proposed Development Changes would be imperceptible where human receptors are present.</p> <p>Any changes to the likely significant effects on ecological receptors due to the Proposed Development Changes are assessed below.</p> <p>There will therefore be no change to the likely significant cumulative effects relating to air quality reported in the Original ES (as amended) as a result of the Proposed Development Changes.</p>	No residual likely significant cumulative effects relating to Air Quality
Surface Water, Flood Risk and Water Resources	No residual likely significant cumulative effects relating to Surface Water, Flood Risk and Water Resources	As previously described in Table 4-1, 4-2, 4-3 and 4-4, there will be no change to the likely significant effects for surface water, flood risk and water resources reported within the Original ES (as amended) as a result of the Proposed Development Changes.	No residual likely significant cumulative effects relating to Surface Water, Flood Risk and Water Resources

ES Chapter	Residual effects after mitigation reported in the Original ES (as amended)	Potential cumulative effects of the Proposed Development Changes	Residual likely significant effects after Proposed Development Changes
		<p>Mitigation presented in the Original ES (as amended) includes appropriate design of structures, mitigation for crossings and measures to manage flood risk during construction.</p> <p>There will therefore be no change to the likely significant cumulative effects relating to surface water, flood risk and water resources reported in the Original ES (as amended) as a result of the Proposed Development Changes.</p>	
Geology and Contaminated Land	No residual likely significant cumulative effects relating to Geology and Contaminated Land	<p>As previously described in Table 4-1, 4-2, 4-3 and 4-4, there will be no change to the likely significant effects for geology and contaminated land reported within the Original ES (as amended) as a result of the Proposed Development Changes.</p> <p>There are no effects on geology, groundwater, soils or land contamination associated with the Proposed Development Changes that may act in conjunction with those associated with other planned projects and local plan allocations in the vicinity.</p> <p>There will therefore be no change to the likely significant cumulative effects relating to geology and contaminated land reported in the Original ES (as amended) as a result of the Proposed Development Changes.</p>	No residual likely significant cumulative effects relating to Geology and Contaminated Land
Noise and Vibration	No residual likely significant cumulative effects relating to Noise and Vibration	As previously described in Table 4-1, 4-2, 4-3 and 4-4, there will be no change to the likely significant effects for noise and vibration reported within the Original ES (as amended) as a result of the Proposed Development Changes.	No residual likely significant cumulative effects relating to Noise and Vibration

ES Chapter	Residual effects after mitigation reported in the Original ES (as amended)	Potential cumulative effects of the Proposed Development Changes	Residual likely significant effects after Proposed Development Changes
		<p>The Proposed Development Changes are not significantly closer to noise sensitive receptors and will not result in changes to likely significant cumulative effects.</p> <p>There will therefore be no change to the likely significant cumulative effects relating to noise and vibration reported in the Original ES (as amended) as a result of the Proposed Development Changes.</p>	
Terrestrial Ecology	No residual likely significant cumulative effects relating to Terrestrial Ecology	<p>As previously described in Table 4-1, 4-2, 4-3 and 4-4, there will be no change to the likely significant effects for terrestrial ecology reported within the Original ES (as amended) as a result of the Proposed Development Changes.</p> <p>The Proposed Development Changes will result in minor removal of habitat within the revised Order Limits but this does not bring in any new ecological receptors or sites to those that have already been assessed within the Original ES (as amended) or introduce any additional likely significant effects. The Proposed Development Changes will also not result in likely significant cumulative effects with other planned projects and local plan allocations in the vicinity.</p> <p>There will therefore be no change to likely significant cumulative effects relating to terrestrial ecology reported in the</p>	No residual likely significant cumulative effects relating to Terrestrial Ecology

ES Chapter	Residual effects after mitigation reported in the Original ES (as amended)	Potential cumulative effects of the Proposed Development Changes	Residual likely significant effects after Proposed Development Changes
		Original ES (as amended) as a result of the Proposed Development Changes.	
Aquatic Ecology	No residual likely significant cumulative effects relating to Aquatic Ecology	<p>As previously described in Table 4-1, 4-2, 4-3 and 4-4, there will be no change to the likely significant effects for aquatic ecology reported within the Original ES (as amended) as a result of the Proposed Development Changes.</p> <p>As there are no pathways for impacts on aquatic ecology as a result of the Proposed Development Changes, there will also be no likely significant cumulative effects with other planned projects and local plan allocations in the vicinity.</p> <p>There will therefore be no change to the likely significant cumulative effects relating to aquatic ecology in the Original ES (as amended) as a result of the Proposed Development Changes.</p>	No residual likely significant cumulative effects relating to Aquatic Ecology
Marine Ecology	No residual likely significant cumulative effects relating to Marine Ecology	<p>As previously described in Table 4-1, 4-2, 4-3 and 4-4, there will be no change to the likely significant effects for marine ecology reported within the Original ES (as amended) as a result of the Proposed Development Changes.</p> <p>The Proposed Development Changes do not fall within the marine environment and will not cause additional airborne noise in their locations outwith that previously assessed. There will be no likely significant cumulative effects with other planned projects and local plan allocations in the vicinity.</p>	No residual likely significant cumulative effects relating to Marine Ecology

ES Chapter	Residual effects after mitigation reported in the Original ES (as amended)	Potential cumulative effects of the Proposed Development Changes	Residual likely significant effects after Proposed Development Changes
		There will therefore be no change to the likely significant cumulative effects relating to marine ecology reported in the Original ES (as amended) as a result of the Proposed Development Changes.	
Ornithology	No residual likely significant cumulative effects relating to Ornithology	<p>As previously described in Table 4-1, 4-2, 4-3 and 4-4, there will be no change to the likely significant effects for ornithology reported within the Original ES (as amended) as a result of the Proposed Development Changes.</p> <p>The Proposed Development Changes are small-scale in relation to the Proposed Development and potential impacts are non-significant due to the minimal area of habitat to be affected. There will be no likely significant cumulative effects with other planned projects and local plan allocations in the vicinity.</p> <p>There will therefore be no change to the likely significant cumulative effects relating to ornithology reported in the Original ES (as amended) as a result of the Proposed Development Changes.</p>	No residual likely significant cumulative effects relating to Ornithology
Traffic and Transport	No residual likely significant cumulative effects relating to Traffic and Transport	As previously described in Table 4-1, 4-2, 4-3 and 4-4, there will be no change to the likely significant effects for traffic and transport reported within the Original ES (as amended) as a result of the Proposed Development Changes.	No residual likely significant cumulative effects relating to Traffic and Transport

ES Chapter	Residual effects after mitigation reported in the Original ES (as amended)	Potential cumulative effects of the Proposed Development Changes	Residual likely significant effects after Proposed Development Changes
		<p>Increased traffic flows from the Proposed Development Changes will not result in any material change to the Original ES (as amended) and there will be no likely significant cumulative effects with other planned projects and local plan allocations in the vicinity.</p> <p>There will therefore be no change to the likely significant cumulative effects relating to traffic and transport reported in the Original ES (as amended) as a result of the Proposed Development Changes.</p>	
Landscape and Visual Amenity	<p>Moderate adverse (significant) effect from visual impact on recreational users at South Gare, England Coast Path and Redcar seafront during construction.</p> <p>Moderate adverse (significant) effect from visual impact on recreational users of the England Coast Path during operation.</p>	<p>As previously described in Table 4-1, 4-2, 4-3 and 4-4, there will be no change to the likely significant effects for landscape and visual amenity reported within the Original ES (as amended) as a result of the Proposed Development Changes.</p> <p>The Proposed Development Changes are limited in scale will be undertaken within an area characterised by industrial development and there will be no likely significant cumulative effects with other planned projects and local plan allocations in the vicinity.</p> <p>There will therefore be no change to the likely significant cumulative effects relating to landscape and visual amenity reported in the Original ES (as amended) as a result of the Proposed Development Changes.</p>	<p>Moderate adverse (significant) effect from visual impact on recreational users at South Gare, England Coast Path and Redcar seafront.</p> <p>Moderate adverse (significant) effect from visual impact on recreational users of the England Coast Path during operation.</p>

ES Chapter	Residual effects after mitigation reported in the Original ES (as amended)	Potential cumulative effects of the Proposed Development Changes	Residual likely significant effects after Proposed Development Changes
Cultural Heritage	No residual likely significant cumulative effects relating to Cultural Heritage	<p>As previously described in Table 4-1, 4-2, 4-3 and 4-4, there will be no change to the likely significant effects for cultural heritage reported within the Original ES (as amended) as a result of the Proposed Development Changes.</p> <p>The construction of the Proposed Development Changes will take place within the existing Order Limits or within small extensions to it and there will be no likely significant cumulative effects with other planned projects and local plan allocations in the vicinity.</p> <p>There will therefore be no change to the likely significant cumulative effects relating to cultural heritage reported in the Original ES (as amended) as a result of the Proposed Development Changes.</p>	No residual likely significant cumulative effects relating to Cultural Heritage
Marine Heritage	No residual likely significant cumulative effects relating to Marine Heritage	<p>As previously described in Table 4-1, 4-2, 4-3 and 4-4, there will be no change to the likely significant effects for marine heritage reported within the Original ES (as amended) as a result of the Proposed Development Changes.</p> <p>The Proposed Development Changes fall outside the study area for Marine Heritage so there will be no likely significant cumulative effects with other planned projects and local plan allocations in the vicinity.</p>	No residual likely significant cumulative effects relating to Marine Heritage

ES Chapter	Residual effects after mitigation reported in the Original ES (as amended)	Potential cumulative effects of the Proposed Development Changes	Residual likely significant effects after Proposed Development Changes
		There will therefore be no change to the likely significant cumulative effects relating to marine heritage reported in the Original ES (as amended) as a result of the Proposed Development Changes.	
Socio-Economics	<p>Major beneficial (significant) effect on construction employment</p> <p>Moderate beneficial (significant) effect on operational employment</p>	<p>As previously described in Table 4-1, 4-2, 4-3 and 4-4, there will be no change to the likely significant effects for socio-economics reported within the Original ES (as amended) as a result of the Proposed Development Changes.</p> <p>The Proposed Development Changes will not result in any material changes to the socio-economic receptors reviewed in the Original ES (as amended). There will be no likely significant cumulative effects with other planned projects and local plan allocations in the vicinity.</p> <p>There will therefore be no change to the likely significant cumulative effects relating to socio-economics reported in the Original ES (as amended) as a result of the Proposed Development Changes.</p>	<p>Major beneficial (significant) effect on construction employment</p> <p>Moderate beneficial (significant) effect on operational employment</p>



5.4 Assessment of Cumulative Likely Significant Effects of the Proposed Development Changes

- 5.4.1 This section of the ES Addendum identifies the likely significant cumulative effects of the Proposed Development Changes with other existing and/or approved projects emerging since the DCO was granted.
- 5.4.2 The assessment of cumulative effects considers the likely significant effects on environmental resources and receptors that will likely occur from the changes arising from the Proposed Development Changes in conjunction with other existing and/or approved projects that have arisen since the grant of the DCO.
- 5.4.3 A combination of professional judgement and established guidance has been used to confirm the scope of the cumulative effects assessment (CEA) and to aid the identification and (where necessary) mitigation of likely significant effects.

Methodology

- 5.4.4 The cumulative effects assessment has been primarily based upon guidance contained within the Planning Inspectorate's (PINS) 'Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment' (PINS, 2024a), which provides advice on the identification and assessment of other existing and/or approved developments.
- 5.4.5 The four-stage approach in advice note seventeen (PINS, 2024a) was adopted for the assessment of cumulative effects:
- Stage 1: Establishing the long list of 'other existing development and/or approved development';
 - Stage 2: Establishing a shortlist of 'other existing development and/or approved development';
 - Stage 3: Information Gathering; and
 - Stage 4: Assessment.
- 5.4.6 The screening assessment presented above in Table 4-1, 4-2, 4-3 and 4-4 identified that the Proposed Development Changes will not affect the likely significant effects presented in the Original ES (as amended) and for the same reasons the Proposed Development Changes will not result in likely additional significant effects for the following topics:
- Hydrology and Water Resources;
 - Geology, Hydrogeology and Contaminated Land;
 - Terrestrial Ecology and Nature Conservation;
 - Aquatic Ecology and Nature Conservation;
 - Marine Ecology and Nature Conservation;
 - Ornithology;



- Landscape and Visual Amenity;
 - Archaeology and Cultural Heritage; and
 - Marine Heritage.
- 5.4.7 Consequently, these topics have been scoped out of the Cumulative Effects Assessment.
- 5.4.8 Only potential effects from construction for Air Quality and Noise and Vibration are therefore considered in this CEA. The Zone of Influences (Zols) for the Proposed Development Changes for construction air quality and construction noise and vibration are presented below in Table 5-2.

Table 5-2: Summary of Zols for the Proposed Development Changes

Environmental Topic	Zols Applied to the Assessment of Cumulative Effects of the Proposed Development Changes
Air Quality	500 m Zol from the Proposed Development Changes. Construction impacts will be due to construction dust and emissions from construction activities, which may affect human receptors up to approximately 350 m from the construction activities and 50 m for ecological receptors. At site entrances the Zol increases to 500 m for both human and ecological receptors due to greater 'track out' of dust e.g. on vehicle wheels.
Noise and Vibration	Construction Vibration: 50 m Zol from the Proposed Development Changes. Construction Noise: 800 m from the Proposed Development Changes.

- 5.4.9 The results of this assessment are presented below in **Table 5-1**. With regards to Major Accidents and Disasters, Population and Human Health, and Climate Change a cumulative effects assessment has not been undertaken as set out above in Section 5.3.
- 5.4.10 Further details of how the four-stage approach was implemented, including the topic Zone of Influences (Zols), are provided within Chapter 24: Cumulative and Combined Effects of the Original ES (as amended) (ES Volume I, Document Ref. 6.2) **[APP-106]**.

Cumulative Effects Assessment

- 5.4.11 The developments included in the updated developments shortlist and progressed to Stages 3 and 4 of the cumulative effects' assessment update are listed in Table 5-3. Appendix A: Long and Short List of Developments considered for Proposed Development Changes CEA provides the basis whereby the final shortlist of developments to be assessed was established. These developments are presented alongside the Proposed Development Changes in Figure 24-4: Long and Short List of Other Developments for the Proposed Development Changes Cumulative Effects Assessment.

Table 5-3: Refined Short List of Projects Assessed at Stage 4 of the Proposed Development Changes Cumulative Effects Assessment

ID	on Applicati	Applicant and brief description of development	Approx. distance to Proposed Development Changes	Status at time of assessment	Development timescale/ overlap in temporal scope	Env info. available to inform assessment? (Y/N)	Relevant environmental topics
1	R/2024/0271/ESM	HyGreen - BP Alternative Energy investments Construction of an electrolytic low carbon hydrogen production facility, hydrogen export pipeline network, electricity and water connections, including water supply and effluent discharge, above ground installations, construction and laydown areas, and ancillary development	Overlap (Change 4 and Change 3)	Validated 22/04/2024	Construction to start in 2025 and last approximately 3 years. Potential for overlap	Yes	Construction Air Quality Construction Noise Construction Vibration
2	EN010150	Lighthouse Green Fuels Limited A 'waste-to-sustainable aviation fuel' facility with on-site generating station capacity of up to 150 MW. The facility will treat a combination of commercial & industrial waste, refuse derived fuel (domestic waste) and solid recovered fuel and convert it to various energy-related products, including sustainable aviation fuel and naphtha.	Overlap (Change 1)	Pre-Application Stage	Construction anticipated to start soon after determination with a construction duration of up to 4 years. Potential for overlap	Yes	Construction Air Quality Construction Noise Construction Vibration



ID	on Applicati	Applicant and brief description of development	Approx. distance to Proposed Development Changes	Status at time of assessment	Development timescale/ overlap in temporal scope	Env info. available to inform assessment? (Y/N)	Relevant environmental topics
3	EN070009	H2 Teesside Limited A hydrogen production plant of up to 1,200 megawatt thermal capacity; hydrogen distribution pipelines; an air separation unit or oxygen supply pipeline; carbon dioxide capture and compression facilities and a connection to the Northern Endurance Partnership infrastructure (also known as Net Zero Teesside); a natural gas supply connection; other gas pipelines; an electricity grid connection; water supply and treatment infrastructure; wastewater treatment and disposal infrastructure; and other utilities connections, telecommunications and other associated and ancillary infrastructure.	Overlap (Change 2, 3 and 4)	Examination Stage	Construction is anticipated to start in Q3 2025 and is expected to be completed by Q4 2030. Potential for overlap	Yes	Construction Air Quality Construction Noise Construction Vibration



ID	on	Applicati	Applicant and brief description of development	Approx. distance to Proposed Development Changes	Status at time of assessment	Development timescale/ overlap in temporal scope	Env info. available to inform assessment? (Y/N)	Relevant environmental topics
4		23/1019/EIS	Greenergy International Ltd Development of Greenergy Renewable Fuels and Circular Products Facility comprising a Sustainable Aviation Fuel Plant and Tyre Plant and associated infrastructure. A temporary construction laydown area, proposed services corridor, pipe bridge, ancillary buildings and car parking	140 m (south east of Change 2)	Approved with Conditions	Construction start date is currently unknown. Construction duration is anticipated to be 42 months. Potential for overlap	Yes	Construction Air Quality Construction Noise
5	FM	R/2024/0644/F	South Tees Developments Limited Engineering operations associated with ground remediation and preparation of land.	300 m (west of Change 3)	Validated 01/10/24	Construction start date and duration is currently unknown. Potential for overlap	No	Construction Air Quality Construction Noise
6	FM	R/2024/0565/F	c/o National Grid Electricity Transmission Extension of the existing Tod Point substation and the erection of 210 m length of 2.5 m high metal palisade security fence	90 m (south of Change 4)	Validated 19/08/24	Construction is anticipated to start in 2025 and is expected to last 21 months. Potential for overlap	No	Construction Air Quality Construction Noise

- 5.4.12 All of the developments identified in Table 1-1 above are considered to have the potential to generate cumulative effects when considered alongside the Proposed Development Changes, by virtue of their nature, proximity to the Site and/or temporal scope (i.e. the planned timescales for construction and operation). They have therefore been progressed to Stage 4 of the cumulative effects assessment and have been assessed in relation to construction Air Quality and Noise and Vibration. The locations of the shortlisted developments in relation to the Proposed Development are shown on Figure 24-4.

Construction Air Quality Cumulative Assessment

- 5.4.13 Table 5-4 below summarises how each of the developments included in the short list (Table 5-3) has been considered with regard to potential cumulative air quality effects.
- 5.4.14 Of those developments, those 'scoped in' are considered to have potential for cumulative effects with regard to air quality, due to being located in the Zol for construction air quality as described in Chapter 24: Cumulative and Combined Effects of the Original ES (as amended) (ES Volume I, Document Ref. 6.2) **[APP-106]** and having non-negligible emissions to air during construction and/or operations.

Table 5-4: Construction Air Quality Cumulative Assessment

ID, Application Reference and Name	Scope of Air Quality cumulative assessment	Assessment of cumulative effect with the Proposed Development Changes	Proposed mitigation applicable to the Proposed Development Changes	Residual Cumulative Effect
1 R/2024/0271/ESM HyGreen	<p>Construction Air Quality Scoped out – The assessment of construction dust impacts reported in the air quality assessment of the Original ES (as amended) [APP-247] has been undertaken in line with industry-standard guidance to demonstrate the level of dust control required to mitigate any potential for likely significant effects. This would therefore also be applied for the Proposed Development Changes.</p> <p>The HyGreen development is within the Zol for construction air quality and therefore there is potential for likely significant cumulative effects before mitigation. However as detailed above, after the adherence to industry-standard guidance and implementation of mitigation in the DCO, construction air quality would not result in potential likely significant effects.</p> <p>It is reasonable to assume that any other construction site in the vicinity of the Proposed Development Changes will have done the same and will control dust through mitigation that is standard practice on all well managed construction sites across the UK. It is therefore concluded that the risk of cumulative construction dust impacts is low and not considered to be significant.</p> <p>The assessment of construction road traffic emissions previously undertaken in Section 4 of this ES Addendum is inherently cumulative. There is therefore no separate</p>	N/A	N/A	No residual cumulative effect

ID, Application
Reference and Name

Scope of Air Quality cumulative assessment

Assessment of
cumulative
effect with the
Proposed
Development
Changes

Proposed
mitigation
applicable to
the Proposed
Development
Changes

Residual Cumulative
Effect

	assessment of cumulative impacts of construction traffic for the Proposed Development Changes.			
2 EN010150 Lighthouse Green Fuels	Construction Air Quality Scoped out – As per ID 1	N/A	N/A	No residual cumulative effect
3 EN070009 H2 Teesside	Construction Air Quality Scoped out – As per ID 1	N/A	N/A	No residual cumulative effect
4 23/1019/EIS Greenergy	Construction Air Quality Scoped out – As per ID 1	N/A	N/A	No residual cumulative effect
5 R/2024/0644/FFM South Tees Developments Limited - Ground remediation and preparation of land.	Construction Air Quality Scoped out – As per ID 1	N/A	N/A	No residual cumulative effect

**ID, Application
Reference and Name**

Scope of Air Quality cumulative assessment

**Assessment of
cumulative
effect with the
Proposed
Development
Changes**

**Proposed
mitigation
applicable to
the Proposed
Development
Changes**

**Residual Cumulative
Effect**

6 R/2024/0565/FFM Tod Point Substation Extension	Construction Air Quality Scoped out – As per ID 1	N/A	N/A	No residual cumulative effect
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Construction Noise and Vibration Cumulative Assessment

- 5.4.15 Table 5-4 below summarises how each of the developments included in the short list (Table 5-3) has been considered with regard to potential cumulative noise and vibration effects.
- 5.4.16 Of those developments, those ‘scoped in’ are considered to have potential for cumulative effects with regard to noise and vibration, due to being located in the Zol for construction noise and vibration as described in Chapter 24: Cumulative and Combined Effects of the Original ES (as amended) (ES Volume I, Document Ref. 6.2) **[APP-106]** and having non-negligible emissions to air during construction and/or operations.

Table 5-5: Noise and Vibration Cumulative Assessment

ID, Application Reference and Name	Scope of Noise and Vibration cumulative assessment	Assessment of cumulative effect with the Proposed Development Changes	Proposed mitigation applicable to the Proposed Development Changes	Residual Cumulative Effect
1 R/2024/0271/ESM HyGreen	Construction Noise and Vibration Scoped in – this development overlaps with Change 3 and Change 4. Possible cumulative effects from construction noise at NSR 3 and NSR 7.	The Proposed Development Changes will not have any likely significant effects on any NSRs. Therefore the significance of the cumulative construction noise effects at all NSRs, except NSR 3 and NSR 7, would be the same as that from the HyGreen alone. Any potential likely significant effects at NSR 3 and NSR 7 would occur without the Proposed Development Changes.	No additional mitigation proposed for cumulative effects. Given the generally localised nature of noise effects associated with the construction of each scheme, and provided each scheme complies with assigned noise and vibration limits and follows the general guidance contained within BS 5228-1 with respect to noise mitigation, it is considered unlikely that significant cumulative construction noise effects will occur at NSR 3 and NSR 7.	No residual cumulative effect
2 EN010150 Lighthouse Green Fuels	Construction Noise and Vibration scoped in – construction traffic related to this development is likely to have an effect on NSR6, and possible construction noise due to distance.	The Proposed Development Changes will not have any likely significant effects on any NSRs. Therefore the significance of the cumulative construction noise effects at all NSRs would be the same as that from Lighthouse Green Fuels alone. NSR6 is a significant distance from the Proposed Development Changes and will not be impacted. Given the generally localised nature of noise effects associated	None proposed	No residual cumulative effect

ID, Application Reference and Name	Scope of Noise and Vibration cumulative assessment	Assessment of cumulative effect with the Proposed Development Changes	Proposed mitigation applicable to the Proposed Development Changes	Residual Cumulative Effect
		with the construction of each scheme, and provided each scheme complies with assigned noise and vibration limits and follows the general guidance contained within BS 5228-1 with respect to noise mitigation, it is considered unlikely that significant cumulative construction noise effects will occur.		
3 EN070009 H2 Teesside	Construction Noise and Vibration scoped in – this development is likely to have significant effects at NSRs 1, 4 and 7 for construction.	The Proposed Development Changes will not have any likely significant effects on any NSRs. Therefore the significance of the cumulative construction noise effects at all NSRs would be the same as that from H2Teesside alone.	None	No residual cumulative effect
4 23/1019/EIS Greenergy	Construction Noise and Vibration scoped in – within Zol, this development is adjacent to NSR 8 and therefore has the potential for significant effects.	The Proposed Development Changes will not have any likely significant effects on any NSRs, including NSR 8. Therefore the significance of any potential cumulative construction noise effects at NSR 8 would be the same as that from Greenergy alone.	None	No residual cumulative effect
5 R/2024/0644/FFM	Construction Noise scoped in – within Zol	The Proposed Development Changes will not have any likely significant effects on any NSRs.	N/A	N/A

ID, Application Reference and Name	Scope of Noise and Vibration cumulative assessment	Assessment of cumulative effect with the Proposed Development Changes	Proposed mitigation applicable to the Proposed Development Changes	Residual Cumulative Effect
South Tees Developments Limited - Ground remediation and preparation of land.	Construction Vibration scoped out – outside Zol	<p>Therefore the significance of the cumulative construction noise effects at all NSRs would be the same as that from the other development alone.</p> <p>Given the generally localised nature of noise effects associated with the construction of each scheme, and provided each scheme complies with assigned noise and vibration limits and follows the general guidance contained within BS 5228-1 with respect to noise mitigation, it is considered unlikely that significant cumulative construction noise effects will occur.</p>		
6 R/2024/0565/FFM Tod Point Substation Extension	<p>Construction Noise scoped in – within Zol</p> <p>Construction Vibration scoped out – outside Zol</p>	<p>The Proposed Development Changes will not have any likely significant effects on any NSRs. Therefore the significance of the cumulative construction noise effects at all NSRs would be the same as that from Tod Point Substation Extension alone.</p> <p>Given the generally localised nature of noise effects associated with the construction of each</p>	N/A	N/A

ID, Application Reference and Name	Scope of Noise and Vibration cumulative assessment	Assessment of cumulative effect with the Proposed Development Changes	Proposed mitigation applicable to the Proposed Development Changes	Residual Cumulative Effect
		scheme, and provided each scheme complies with assigned noise and vibration limits and follows the general guidance contained within BS 5228-1 with respect to noise mitigation, it is considered unlikely that significant cumulative construction noise effects will occur.		

Residual Effects and Conclusions

- 5.4.17 As detailed above, this section of the ES Addendum has assessed any potential likely significant cumulative effects of the Proposed Development Changes any new other planned development since the DCO was granted. This process has identified that the Proposed Development Changes will not result in any likely significant residual cumulative effects.



5.5 Assessment of Combined Likely Significant Effects

- 5.5.1 This section of the ES Addendum identifies the changes in likely significant effects in the Combined Effects Assessment within Chapter 24: Cumulative and Combined Effects **[APP-106]** of the Original ES (as amended) that arise as a result of the Proposed Development Changes.
- 5.5.2 Details of the methodology of the previously completed Combined Effects Assessment are provided in Chapter 24: Cumulative and Combined Effects of the Original ES (as amended) (ES Volume I, Document Ref. 6.2) **[APP-106]**.
- 5.5.3 As mentioned previously in Section 4 of this DCO Non-Material Change ES Addendum, the Proposed Development Changes will not result in changed or new likely significant effects compared to those presented in the Original ES (as amended). Therefore, no changes to the Combined Effects Assessment within Chapter 24: Cumulative and Combined Effects (Volume I, Document Ref. 6.2) **[APP-106]** of the Original ES (as amended) are deemed to be required and the assessment remains valid.

6. Consultation

- 6.1.1 The Applicants wrote to the Planning Inspectorate ('PINS') and the Secretary of State ('SoS') for DESNZ in July 2024 to confirm their intention to submit a non-material change ('NMC') application and to outline the proposed non-material changes. As part of the same submission, the Applicants consulted the Secretary of State for DESNZ on the proposed scope of the NMC Application.
- 6.1.2 In accordance with Regulation 7(3) of the Infrastructure Planning (Changes to, and Revocation of, Development Consent Orders) Regulations 2011 (the '2011 Regulations'), the Applicants also submitted a letter to the SoS (accompanied by an updated list of those notified pursuant to Section 56 of the PA 2008) on 5 November 2024 seeking the consent of the SoS to undertake a more focussed and targeted consultation for the Application.
- 6.1.3 The SoS responded to the Applicants under Regulation 7(3) on 18 December 2024 confirming agreement with the proposed list of consultees, subject to the inclusion of one additional entity.
- 6.1.4 The Applicants advised the relevant local planning authorities, Redcar and Cleveland Borough Council and Stockton-on-Tees Borough Council, of the proposed non-material change application in July 2024.
- 6.1.5 Once the Non-Material Change application is submitted, the Applicants will publicise the Proposed Development Changes as required under Regulation 6 of the 2011 Regulations. In parallel, the entities which form the agreed consultee list (see para 5.1.3) will be consulted on the NMC under Regulation 7.
- 6.1.6 Following the close of the consultation period (to be set out of the Regulation 6 Notice), a Consultation Statement will be supplied to the PINS under Regulation 7A of the 2011 Regulations. The statement will detail the relevant steps taken by the Applicants to consult on the Proposed Changes.



7. Summary

- 7.1.1 This DCO Non-Material Change ES Addendum has identified how the Proposed Development Changes affect the content, scope and conclusions of the Original ES (as amended) submitted as part of the DCO Application.
- 7.1.2 The Proposed Development Changes will not result in changed or new likely significant effects compared to those presented in the Original ES (as amended).



Appendix A Long and Short List of Developments for the Proposed Development Changes Cumulative Effects Assessment

Other Development' Details										Stage 1			Stage 2							
										Air Quality	Noise & Vibration									
ID	Application Reference	Authority	Location	Applicant/Description	Approx. distance from Proposed Development Changes	Site Area (Hectares)	Timescale of Development	Status	Tier	Construction ZOI (500 m)	Construction Vibration Zol (50 m)	Construction Noise Zol (800 m)	Progress to Stage 2?	Scale and nature of development likely to have a significant effect?	Major Development (Y/N)?	ES/ Scoping Report submitted? (Y/N)	Overlap in Temporal Scope (Construction only)? (Y/N)	Other Factors	Progress to Stage 3/4?	Comments/ Justification
1	R/2024/0271/ESM	Redcar & Cleveland	Land at the Foundry Site (Foundry Central), Teesworks, other land at Teesworks and land in the vicinity of and at Wilton International site and Lackenby	HyGreen - BP Alternative Energy investments Construction of an electrolytic low carbon hydrogen production facility, hydrogen export pipeline network, electricity and water connections, including water supply and effluent discharge, above ground installations, construction and laydown areas, and ancillary development	Overlap (Change 4 and Change 3)	241.39 ha	Construction to start in 2025 and last approximately 3 years.	Validated 22/04/2024	1	Y	Y	Y	Y	Y	Y	Y	Potential for overlap	N/A	Y	Major development with the potential for signifcant effects. Potential overlap in construction periods. Site boundary overlaps Proposed Development Changes boundary.
2	EN010150	National Infrastructure Projects (PINS)	Huntsmans Drive, Port Clarence, Stockton-on-Tees, TS2 1TT	Lighthouse Green Fuels Limited A 'waste-to-sustainable aviation fuel' facility with on-site generating station capacity of up to 150 MW. The facility will treat a combination of commercial & industrial waste, refuse derived fuel (domestic waste) and solid recovered fuel and convert it to various energy-related products, including sustainable aviation fuel and naphtha.	Overlap (Change 1)	205.66 ha	Construction anticipated to start soon after determination with a construction duration of up to 4 years.	Pre-Application Stage	3	Y	Y	Y	Y	Y	Y	Y	Potential for overlap	N/A	Y	Major development with the potential for signifcant effects. Potential overlap in construction periods. Site boundary overlaps Proposed Development Changes boundary.
3	EN070009	National Infrastructure Projects (PINS)	Land within the boroughs of Redcar and Cleveland and Stockton-on-Tees and Hartlepool	H2 Teesside Limited A hydrogen production plant of up to 1,200 megawatt thermal capacity; hydrogen distribution pipelines; an air separation unit or oxygen supply pipeline; carbon dioxide capture and compression facilities and a connection to the Northern Endurance Partnership infrastructure (also known as Net Zero Teesside);a natural gas supply connection; other gas pipelines; an electricity grid connection; water supply and treatment infrastructure; wastewater treatment and disposal infrastructure; and other utilities connections, telecommunications and other associated and ancillary infrastructure.	Overlap (Change 2, 3 and 4)	507 ha	Construction is anticipated to start in Q3 2025 and is expected to be completed by Q4 2030.	Examination Stage	1	Y	Y	Y	Y	Y	Y	Y	Potential for overlap	N/A	Y	Major development with the potential for signifcant effects. Potential overlap in construction periods. Site boundary overlaps Proposed Development Changes boundary.

4	23/1019/EIS	Stockton-on-Tees	Land West Of Epax Pharma U K Limited North South Access Road Seal Sands TS2 1UB TS2 1UB	Greenergy International Ltd: Development of Greenergy Renewable Fuels and Circular Products Facility comprising a Sustainable Aviation Fuel Plant and Tyre Plant and associated infrastructure. A temporary construction laydown area, proposed services corridor, pipe bridge, ancillary buildings and car parking	140 m (south east of Change 2)	51.6 ha	Construction start date is currently unknown. Construction duration is anticipated to be 42 months.	Approved with Conditions	1	Y	N	Y	Y	Y	Y	Y	Potential for overlap	N/A	Y	Major development with the potential for signifcant effects. Potential overlap in construction periods. In close proximity to the Proposed Development Changes boundary.
5	R/2024/0644/FFM	Redcar & Cleveland Borough Council	LAND AT THE FOUNDRY SITE TEESWORKS NEAR REDCAR	South Tees Developments Limited; Engineering operations associated with ground remediation and preparation of land.	300 m (west of Change 3)	5.2 ha	Construction start date and duration is currently unknown.	Validated 01/10/24	1	Y	N	Y	Y	Y	Y	N	Potential for overlap	N/A	Y	Major development with the potential for signifcant effects. Potential overlap in construction periods. In close proximity to the Proposed Development Changes boundary.
6	R/2024/0565/FFM	Redcar & Cleveland Borough Council	Tod Point Substation Tod Point Road Redcar	c/o National Grid Electricity Transmission; Extension of the existing substation and the erection of 210m length of 2.5m high metal palisade security fence	90 m (south of Change 4)	1.1 ha	Construction is anticipated to start in 2025 and is expected to last 21 months.	Validated 19/08/24	1	Y	N	Y	Y	Y	Y	N	Potential for overlap	N/A	Y	Major development with the potential for signifcant effects. Potential overlap in construction periods. In close proximity to the Proposed Development Changes boundary.