

KEADBY 3 **CARBON CAPTURE POWER STATION**

A collaboration between **SSE Thermal** and **Equinor**

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The Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) Order

Land at and in the vicinity of the Keadby Power Station site, Trentside, Keadby, North Lincolnshire

**Proposed Development Changes:
Environmental Statement (ES) Addendum
– Volume I (Main Volume)**

The Planning Act 2008

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

Applicant: Keadby Generation Limited

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GLOSSARY

Abbreviation	Description
ABP	Associated British Ports – UK port operator; relevant navigational authority for the River Trent as ‘ABP Humber’
ADMS	Atmospheric Dispersion Modelling System - a proprietary model for the assessment of effect of emissions to air from point sources and road sources.
AGI	Above Ground Installation - installations used to support the safe and efficient operation of a pipeline; above ground installations are needed at the start and end of a cross-country pipeline and at intervals along the route.
AGL	Above Ground Level - a height above ground level is a height measured with respect to the underlying ground surface.
AIL	Abnormal Indivisible Load - a load that cannot be broken down into smaller loads for transport without undue expense or risk of damage. It may also be a load that exceeds certain parameters for weight, length and width.
ALARP	As Low As Reasonably Practicable - a term often used in the regulation and management of safety-critical and safety-involved systems. The ALARP principle is that the residual risk shall be reduced as far as reasonably practicable.
ALC	Agricultural Land Classification - part of the planning system in England and Wales which classifies agricultural land into five categories according to versatility and suitability for growing crops.
AOD	Above Ordnance Datum - a spot height (an exact point on a map) with an elevation recorded beside it that represents its height above a given datum.
APFP	Applications: Prescribed Forms and Procedure related to The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

Abbreviation	Description
APIS	Air Pollution Information System - provides a comprehensive source of information on air pollution and the effects on habitats and species. It supports the assessment of potential effects of air pollutants on habitats and species.
AQAL	Air Quality Assessment Levels - the baseline level of each pollutant species used during air quality assessments. The results of modelling undertaken to predict concentrations of pollutants are compared against these AQALs.
AQS	Air Quality Objectives - the target date on which exceedances of an air quality standard must not exceed a specified number.
BAT	Best Available Techniques - the available techniques which are the best for preventing or minimising emissions and impacts on the environment. BAT is required for operations involving the installation of a facility that carries out industrial processes. Techniques can include both the technology used and the way an installation is designed, built, maintained, operated and decommissioned.
BAT-AELS	Best Available Techniques – Associated Emission Levels - Achievable emissions values following the implementation of the best available techniques for preventing or minimising emissions and impacts on the environment.
BEIS	Department for Business, Energy and Industrial Strategy – department of the UK Government.
BMV	Best and Most Versatile - the best and most versatile land is defined as Grades 1 (excellent quality), 2 (very good quality) and 3a (good quality) agricultural land.
BNG	Biodiversity Net Gain - an approach to development that intends to leave biodiversity in a better state than before. It encourages developers to provide an increase (in extent and/or quality) in appropriate natural habitat over and above that required to compensate for the habitat losses that would arise from the development concerned. In so doing, the BNG approach aims to assess the current loss of biodiversity through development and contribute to the restoration of ecological networks.
BS	British Standard - Standard produced by the British Standards Institution based upon the principles of standardisation recognised inter alia in European Policy.

Abbreviation	Description
CCGT	Combined Cycle Gas Turbine - a highly efficient form of energy generation technology. An assembly of heat engines work in tandem using the same source of heat to convert it into mechanical energy which drives electrical generators and consequently generates electricity.
CCP	Carbon Capture Plant – plant used to capture carbon dioxide (CO ₂) emissions produced from the use of fossil fuels in electricity generation and industrial processes.
CCUS	Carbon Capture, Usage and Storage - group of technologies designed to reduce the amount of carbon dioxide (CO ₂) released into the atmosphere from coal and gas power stations as well as heavy industry including cement and steel production. Once captured, the CO ₂ can be either re-used in various products, such as cement or plastics (usage), or stored in geological formations deep underground (storage).
CEMP	Construction Environmental Management Plan - a plan to outline how a construction project will avoid, minimise or mitigate effects on the environment and surrounding area.
CERC	Cambridge Environmental Research Consultants
CIEEM	Chartered Institute of Ecology and Environmental Management - professional body for ecologists and environmental managers in the United Kingdom.
CO ₂	Carbon Dioxide - an inorganic chemical compound with a wide range of commercial uses.
CTMP	Construction Traffic Management Plan - a plan outlining measures to organise and control vehicular movement on a construction site so that vehicles and pedestrians using site routes can move around safely.
dB	Decibel. A unit used to express relative differences in sound power or intensity. The decibel (dB) scale is logarithmic and used to describe the measurement and audibility of sounds within the range of approximately 0-140dB
DBA	Desk Based Assessment - sets out the heritage baseline for the Proposed Development Site in order to identify all known designated and non-designated heritage assets
DCC	Direct Contact Cooler

Abbreviation	Description
DCO	Development Consent Order - made by the relevant Secretary of State pursuant to The Planning Act 2008 to authorise a Nationally Significant Infrastructure Project. A DCO can incorporate or remove the need for a range of consents which would otherwise be required for a development. A DCO can also include rights of compulsory acquisition.
DEFRA	Department for Environment, Food and Rural Affairs – the UK government department responsible for environmental protection, food production and standards, agriculture, fisheries and rural communities in the United Kingdom. The department's priorities are to grow the rural economy, improve the environment and safeguard animal and plant health.
DML	Deemed Marine Licence – licence provided by the Marine Management Organisation (MMO), granted as part of a DCO.
EA	Environment Agency - a non-departmental public body sponsored by the United Kingdom government's Department for Environment, Food and Rural Affairs (DEFRA), with responsibilities relating to the protection and enhancement of the environment in England.
EIA	Environmental Impact Assessment - a term used for the assessment of environmental consequences (positive or negative) of a plan, policy, program or project prior to the decision to move forward with the proposed action.
EPR	The Environmental Permitting (England and Wales) Regulations 2016 - Regulations that came into force in 2008 combining Pollution Prevention and Control and Waste Management Licensing regulations.
ExA	Examining Authority
ES	Environmental Statement - a report in which the process and results of an Environment Impact Assessment are documented.
FRA	Flood Risk Assessment - an assessment of the flood risk from all sources of flooding for a development
FRAP	Flood Risk Activity Permit – permit to work in, under and over a main river or if work could affect flooding from a main river or sea.
GHG	Greenhouse Gases - atmospheric gases such as carbon dioxide, methane, chlorofluorocarbons, nitrous oxide, ozone, and water vapour that absorb and emit infrared radiation emitted by the Earth's surface, the atmosphere and clouds.
Ha	Hectare – a metric unit of measurement, equal to 2.471 acres or 10,000 square metres.

Abbreviation	Description
HE	Historic England - an executive non-departmental body of the British Government tasked with protecting the historical environment of England.
HGV	Heavy Goods Vehicle - vehicles with a gross weight in excess of 3.5 tonnes.
HLCP	Humber Low Carbon Pipelines – a Nationally Significant Infrastructure Project promoted by National Grid Ventures intended to help decarbonise industry by connecting major emitters and power stations in the Humber region (including the Proposed Development at Keadby) to enable transportation of captured carbon dioxide to the East Coast for onward connection to an offshore pipeline.
HRSG	Heat Recovery Steam Generator - an energy recovery heat exchanger that recovers heat from a hot gas stream. It produces steam that can be used in a process (cogeneration) or used to drive a steam turbine (combined cycle).
HRA	Habitats Regulations Assessment - the assessment of the impacts of implementing a plan or policy on a Natura 2000 site required under the Habitats Directive.
HSE	Health and Safety Executive - the body responsible for the encouragement, regulation and enforcement of workplace health, safety and welfare.
IAQM	Institute of Air Quality Management - professional body for air quality air professionals.
IEMA	Institute of Environmental Management and Assessment
IED	Industrial Emissions Directive – European Union Directive (2010/75/EU) committing member states to control and reduce the impact of industrial emissions on the environment.
INNS	Invasive Non-Native Species - species that have occurred outside of their natural range. Invasive species have the potential to hinder or prevent survival of others within the ecosystem.
ISO	International Organization for Standardization - an international standard setting body composed of representatives for various national standards organisations.
JNCC	The Joint Nature Conservation Commission - the public body that advises the UK Government and devolved administrations on UK-wide and international nature conservation.
KGL	Keadby Generation Limited

Abbreviation	Description
kV	Kilovolt - unit of electrical potential. There are 1,000 volts in a kilovolt.
kW	Kilowatt - unit of power.
LBMEP	Landscaping and Biodiversity Management and Enhancement Plan
LVIA	Landscape and Visual Impact Assessment – the process of evaluating the effect of a proposal upon the landscape and views of it.
LWS	Local Wildlife Site - defined areas, identified and selected for their nature conservation value, based on important, distinctive and threatened habitats and species with a national, region.
MA&D	Major Accidents and Disasters - the potentially significant effects of a development.
mAOD	Metres above Ordnance Datum
MCA	Maritime Coastguard Agency - an Executive Agency of the Department for Transport concerned with maritime safety.
MHCLG	Ministry of Housing, Communities and Local Government
MW	Megawatt - unit of energy.
National Highways	Formerly Highways England – National Highways operate, maintain and improve England's motorways and major A-roads.
NEP	The Northern Endurance Partnership - a partnership between bp, Eni, Equinor, National Grid, Shell and Total to develop infrastructure to transport and store CO2 emissions.
NGC	National Grid Carbon
NGCL	National Grid Carbon Limited
NGR	National Grid Reference - system of geographical grid references.
NH ₃	Ammonia
NLC	North Lincolnshire Council
NO ₂	Nitrogen Dioxide
NO _x	Oxides of Nitrogen

Abbreviation	Description
NPPF	National Planning Policy Framework - the NPPF came into effect on 27 March 2012 (with some transitional arrangements), replacing the majority of national planning policy other than NPS. The NPPF is part of the Government's reform of the planning system intended to make it less complex, to protect the environment and to promote sustainable growth. It does not contain any specific policies on Nationally Significant Infrastructure Projects, but its policies may be taken into account in decisions on DCOs if the Secretary of State considers them to be both important and relevant.
NPS	National Policy Statement - Statement produced by Government under the Planning Act 2008 providing the policy framework for Nationally Significant Infrastructure Projects. They include the Government's view of the need for and objectives for the development of Nationally Significant Infrastructure Projects in a particular sector such as energy and are used to determine applications for such development.
NRA	Navigation Risk Assessment - assesses the hazards and risks affecting vessel navigation.
NSIP	Nationally Significant Infrastructure Project - defined by the Planning Act 2008 and cover projects relating to energy (including generating stations, electric lines and pipelines); transport (including trunk roads and motorways, airports, harbour facilities, railways and rail freight interchanges); water (dams and reservoirs, and the transfer of water resources); wastewater treatment plants and hazardous waste facilities. These projects are only defined as nationally significant if they satisfy a statutory threshold in terms of their scale or effect.
NSR	Noise Sensitive Receptor - locations or areas where dwelling units or other fixed, developed sites of frequent human use occur which may be sensitive to noise impacts.
NTS	Non-Technical Summary - a summary of the Environmental Statement written in non-technical language for ease of understanding.
OEP	Office for Environmental Protection - new, independent statutory body with the principal objective of contributing to environmental protection and the improvement of the natural environment under the Environment Act 2021
OMH	Open Mosaic Habitats - found mainly in urban and formerly industrial areas and have high biodiversity value.

Abbreviation	Description
Opening Year	The year of opening (post-construction) of a scheme when it becomes operational.
OS	Ordnance Survey - the national mapping agency for Great Britain.
PC	Process Contribution - represents the change caused by the Proposed Development.
PCC	Power and Carbon Capture
PEA	Preliminary Ecological Appraisal - an ecological assessment method which evaluates the existing ecological value of a site.
PEC	Predicted Environmental Concentration – the Process Contribution (PC) plus background concentration.
PHE	Potentially Harmful Elements – for example arsenic (As), cadmium (Cd) and copper (Cu).
PHEA	Preliminary Hazard and Environmental Assessments - determines the scope of hazards and environmental impacts related to a project.
PIA	Personal Injury Accident - an incident to the body, mind or emotions.
PINS	Planning Inspectorate - executive agency of the Department for Communities and Local Government of the United Kingdom Government. It is responsible for determining final outcomes of town planning.
PRoW	Public Right of Way - a highway where the public has the right to walk. It can be a footpath (used for walking), a bridleway (used for walking, riding a horse and cycling), or a byway that is open to all traffic (including motor vehicles).
SAC	Special Area of Conservation - high quality conservation sites that are protected under the European Union Habitats Directive, due to their contribution to conserving those habitat types that are considered to be most in need of conservation.
SoS	Secretary of State - the decision maker for DCO applications and head of Government department.
SPA	Special Protection Area - strictly protected sites classified in accordance with article 4 of the EC birds directive. Special Protection Areas are Natura sites which are internationally important sites for the protection of threatened habitats and species.

Abbreviation	Description
SSSI	Site of Special Scientific Interest - nationally designated Sites of Special Scientific Interest, an area designated for protection under the Wildlife and Countryside Act 1981 (as amended), due to its value as a wildlife and/or geological site.
SWMP	Site Waste Management Plan - a plan setting out how resources will be managed, and waste controlled at all stages during a construction project..
TTWA	Travel to Work Area - statistical tool used by UK Government agencies and local authorities to indicate an area where the population would generally commute to a larger town or city for employment purposes.
UK	United Kingdom
UKHSA	The UK Health Security Agency is an executive government agency sponsored by the Department of Health and Social Care that commenced operation on 1 October 2021, taking over the responsibilities of Public Health England whose remit was to protect and improve the nation's health and wellbeing and reduce health inequalities.
WHO	World Health Organisation - an agency of the United Nations focusing on public health.
WSI	Written Scheme of Investigation
ZCH	Zero Carbon Humber - a consortium of energy and industrial companies and academic institutions with a shared vision to transform the Humber region into the UK's first net-zero carbon cluster by 2040.
ZoI	Zone of Influence - study areas identified for the purposes of the Cumulative and Combined Effects assessment.
ZTV	Zone of Theoretical Visibility - a computer generated tool to identify the likely (or theoretical) extent of visibility of a development.

ES ADDENDUM VOLUME I (MAIN TEXT) – CONTENTS

Section 1	Introduction and Scope of Environmental Statement Addendum
Section 2	Proposed Development Changes
Section 3	Changes to the Submitted Environmental Statement
Document Ref. 6.2.1	Chapter 1 - Introduction Rev 02
Document Ref. 6.2.2	Chapter 2 - Assessment Methodology Rev 02
Document Ref. 6.2.3	Chapter 3 - The Site and Surrounding Area Rev 02
Document Ref. 6.2.4	Chapter 4 - The Proposed Development Rev 02
Document Ref 6.2.5	Chapter 5 - Construction Programme and Management – Rev 02
Document Ref. 6.2.6	Chapter 6 - Consideration of Alternatives – Rev 02
Document Ref. 6.2.7	Chapter 7 - Planning and Legislative Framework – Rev 02.
Section 4	Environmental Assessment of Proposed Development Changes
Section 5	Consultation

CONTENTS

1.0	Introduction and Scope of Environmental Statement Addendum	1
1.1	Introduction.....	1
1.2	Changes in Legislation, Policy and Guidance	2
1.3	Scope and methodology of the ES Addendum.....	4
1.4	Structure of this ES Addendum.....	4
2.0	Proposed Development Changes	5
2.1	Introduction.....	5
2.2	Description of Proposed Development Changes.....	5
2.3	Explanation of Proposed Development Changes	6
3.0	Changes to the submitted Environmental Statement	10
3.1	Introduction.....	10
3.2	Changes to Chapters 1-7 of the Submitted ES	10
4.0	Environmental Assessment of Proposed Development Changes	25
4.1	Introduction.....	25
4.2	Scope and methodology for the assessment of the Proposed Development Changes.....	25
5.0	Consultation	36
5.1	Overview.....	36
5.2	Summary of consultation	39

TABLES

Table 1:	Main dimensions for up to two absorbers and carbon dioxide stripper*	8
Table 2:	Assessment Years and Assessment Scenarios: Temporal Scope of Assessment	11
Table 3:	Maximum Design Parameters (including limits of deviation)	16
Table 4:	Scoping of environmental assessments for Proposed Development Changes	26
Table 5:	Summary of Consultation Relevant to the EIA Addendum	36

1.0 INTRODUCTION AND SCOPE OF ENVIRONMENTAL STATEMENT ADDENDUM

1.1 Introduction

Background

- 1.1.1 Keadby Generation Limited ('the Applicant') submitted an application ('the Application') for a Development Consent Order (a 'DCO'), to the Secretary of State (the 'SoS') for Business, Energy and Industrial Strategy under Section 37 of the Planning Act 2008 ('the 2008 Act') in respect of the Keadby 3 Low Carbon Gas Power Station Project. The Application was submitted on 1 June 2021 and was accompanied by an Environmental Statement ('ES') [**APP-043 to APP-159**] (herein referred to as 'the submitted ES') and ES Non-Technical Summary (NTS) ('the submitted NTS') [**APP-042**] prepared in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ('the EIA Regulations').
- 1.1.2 The Applicant is seeking development consent for the construction, operation and maintenance of a new low carbon Combined Cycle Gas Turbine (CCGT) Generating Station ('the Proposed Development') on land at, and in the vicinity of, the existing Keadby Power Station, Trentside, Keadby, Scunthorpe DN17 3EF (the 'Proposed Development Site').
- 1.1.3 The Applicant submitted a request to make some changes to the Application and notified the Examining Authority of this on 1 February 2022, with five key changes proposed ('the Proposed Development Changes') as described in the Notification of a Proposed Application for Change document (**Application Document Ref. 10.1**) [**REP2-014**]. The Proposed Development Changes result from ongoing design development by the Applicant given the 'First of a Kind' nature of the Proposed Development and are not currently accommodated within the Application.
- 1.1.4 This ES Addendum is provided in reference to the material change application and is being submitted to the Examining Authority on 5 April 2022. The project name has also been changed to Keadby 3 Carbon Capture Power Station.

Purpose of the ES Addendum

- 1.1.5 The purpose of this ES Addendum is to present an assessment of any new or different significant effects that are likely to result from the Proposed Development Changes and to support consultees in developing an informed view of the likely significant environmental effects of the Proposed Development.
- 1.1.6 The Applicant has taken into consideration comments received through this consultation and review opportunities to amend the design of the Proposed Development Changes accordingly.

1.1.7 This Addendum only considers changes in legislation, baseline conditions or potential effects since the submitted ES was prepared; if no change is listed then conditions are the same as those presented in the submitted ES.

1.2 Changes in Legislation, Policy and Guidance

1.2.1 The Environment Bill, first introduced in draft form in December 2018, was approved by Parliament on 9 September 2021. The Environment Act 2021 (The Stationary Office, 2021) sets out legislation to provide a post-Brexit environmental framework for the UK. As a summary, the Act includes new legislation such as: binding targets on air and water quality, biodiversity, and resource efficiency and waste reduction.

1.2.2 This Act was given Royal Assent after the submission of the Application. The Applicant understands that the majority of the Environment Act 2021 is not yet in force and that the Office for Environmental Protection (OEP) has been brought into effect but is yet to receive its enforcement powers in England that would apply to the Proposed Development. The Applicant will continue to monitor implementation of the Environment Act throughout the course of Examination and will consider the need for changes where they apply to policy or plans and their implementation, during the course of examination. Until any changes are made, extant legislation and policies remain in force.

UK Energy and Climate Change Policy

1.2.3 The Net Zero Strategy: Build Back Greener (HM Government, 2021) expands on key commitments in the Energy White Paper, proposing to deliver “four carbon capture usage and storage (CCUS) clusters, capturing 20-30 MtCO₂ per year across the economy, including 6 MtCO₂ of industrial emissions, per year by 2030”.

1.2.4 Setting aside 6 mega tonnes of carbon dioxide (MtCO₂) per year to be captured from industrial emissions, this leaves a commitment of between 14-24 MtCO₂ per year to be captured from energy sources. The Proposed Development, to form part of the CCUS cluster in the Humber region, will capture some 2 MtCO₂ per year. This means that the country needs between 7 and 12 carbon capture-enabled power stations of this size in order to meet the Government’s commitments, or approximately 2-3 within each CCUS cluster, by 2030. In conclusion, the need case for the Proposed Development is greater as a result of the publication of the Net Zero Strategy.

1.2.5 Additional consideration of the Net Zero Strategy is provided in the Planning Statement submitted by the Applicant at Deadline 3 [REP3-006].

Draft Revised National Policy Statements

1.2.6 On 6 September 2021 the Department for Business, Energy & Industrial Strategy published revised draft energy National Policy Statements (EN1 to EN-5) for consultation. These do not constitute the relevant National Policy

Statements (NPS) (i.e. they do not have effect under Section 104(1) of the 2008 Act) but may potentially be important or relevant matters for consideration, pursuant to Section 104(2)(d).

- 1.2.7 Descriptions of how the draft policy relates to the Proposed Development can be found in the is provided in the Planning Statement submitted by the Applicant at Deadline 3 [REP3-006].

Other National Policy

- 1.2.8 The latest version of the National Planning Policy Framework (NPPF) was most recently updated in July 2021 (Ministry of Housing, Communities & Local Government, 2021). There are not considered to be any material changes between the policy in the June 2019 version of the NPPF and this latest version of relevance to the Proposed Development.
- 1.2.9 Additional consideration of the NPPF is provided in the Planning Statement submitted by the Applicant at Deadline 3 [REP3-006].

Local Policy

- 1.2.10 North Lincolnshire Council (NLC) is preparing a new Local Plan to 2036. Once agreed (formally adopted), it will replace the current North Lincolnshire Local Plan, the Core Strategy and the Housing and Employment Land Allocations Development Plan Documents (DPD). The Regulation 19 Publication Draft has been issued and consultation concluded on 3 December 2021. The current expectations of the Spatial Planning Team regarding the publication of the adopted New Local Plan are December 2022 (at the earliest) to June 2023. In their Local Impact Report [REP1-022] NLC state:

“The currently anticipated timeframe for adoption of the new Local Plan is 12-18 months and it is unlikely that the document will have been subject to formal examination prior to the expiry of the statutory 6 month examination period in respect of this application. As such it is considered that the emerging Local Plan is not a relevant consideration in the determination of this DCO application.”

- 1.2.11 NLC do not regard the new Local Plan, at its current stage of adoption, to have relevance to the determination of the Proposed Development, which is evidenced in the Local Impact Report at paragraph 3.6.3 [REP1-022].

Other Guidance and Policy

- 1.2.12 Other guidance and policy changes specific to each technical discipline in this ES Addendum and that are relevant to the environmental assessment are discussed in the relevant technical chapter of Volume II of this ES Addendum.

1.3 Scope and methodology of the ES Addendum

Overview

- 1.3.1 This section outlines the scope and methodology used in this ES Addendum. This ES Addendum should be read in conjunction with the ES submitted with the Application [**APP-043** to **APP-159**].
- 1.3.2 Throughout this ES Addendum, references are given to the Examination Library numbers assigned by the Examining Authority (identified within square brackets, e.g. [**APP-043**] for information previously accepted for examination and to the Applicant's document numbers ('Application Document Ref.' numbers) for documents which have yet to be assigned an Examination Library number by the Examining Authority.
- 1.3.3 A glossary of terms and list of abbreviations used in this ES Addendum is provided within **Application Document Ref. 6.2.0 – Rev 02**.
- 1.3.4 The general assessment methodology and topic-specific methodologies, relevant legislation, policy and guidance, key assumptions and limitations set out in submitted ES Volume I, **Chapters 2-7** submitted with the Application [**APP-045** to **APP-050**] remain unchanged, unless specifically stated in this ES Addendum.

1.4 Structure of this ES Addendum

- 1.4.1 This ES Addendum comprises three volumes:
- ES Volume I – describes the changes to the Proposed Development and outlines whether the changes affect the submitted I ES technical chapters and appendices [**APP-044** to **APP-098**] and submitted ES figures [**APP-100** to **APP-159**] submitted with the Application;
 - ES Volume II - presents updates to the environmental assessments (ES chapters and technical appendices) resulting from the Proposed Development Changes; and
 - ES Volume III - provides updated ES figures, where these are required.
- 1.4.2 This ES Addendum is also accompanied by a NTS which provides a summary of the key findings from the ES Addendum in non-technical language. The ES Addendum NTS provides an update to the NTS submitted with the Application [**APP-042**].

2.0 PROPOSED DEVELOPMENT CHANGES

2.1 Introduction

2.1.1 This chapter of the ES Addendum presents a description of the Proposed Development Changes.

2.2 Description of Proposed Development Changes

2.2.1 Since the submission of the Application, five changes have been identified through the ongoing design contractor involvement process that are required as changes to the Application for the Proposed Development. These Proposed Development Changes are:

- Change 1 – a small increase to the Order Limits to provide additional space for safe mooring of the largest vessels delivering abnormal indivisible loads (AIL). This change involves:
 - inclusion of land within the River Trent (**Work No. 10C**) which will be required for the mooring of vessels at the Waterborne Transport Offloading Area (**Work No. 10B**);
- Change 2 - changes to the Additional AIL Route (**Work No. 10A**) which requires the following updates to the Order Limits:
 - incorporating a new section of Additional AIL Route through the Keadby 1 Power Station outage/ contractor compound;
 - extension of the Additional AIL Route for larger AIL to avoid the operational Keadby 2 Power Station;
- Change 3 - an increase to the maximum parameters (height) presented in Schedule 11 – Design Parameters of the draft DCO [**APP-005**] and **Chapter 4: The Proposed Development [APP-047] for Work No. 1C** for the twin absorber columns/ stack option in the event that this option is selected for the removal of CO₂ from flue gases within the carbon capture plant (CCP). The maximum height of the twin structures would be increased by up to 22m as shown in Table 1, noting that even at this increased height, the twin absorbers and associated stacks would still be lower in height than the proposed single absorber option and associated stack;
- Change 4 - an increase to the maximum parameters (height) presented in Schedule 11 – Design Parameters of the draft DCO [**APP-005**] and **Chapter 4: The Proposed Development [APP-047] for Work No. 1C** for the CO₂ stripper in the event that a single absorber is developed. This is required to allow an additional height of up to 10m for the stripper; and
- Change 5 – an increase of up to 50,000m³ of imported fill material, increasing the maximum proposed import volume for soil, as described in **Chapter 5: Construction Programme and Management (Application Document Ref. 6.2.5) [APP-048]**, to 180,000m³ to provide a suitable

platform for foundations and buildings/ equipment across the Proposed Power and Carbon Capture (PCC) Site.

2.3 Explanation of Proposed Development Changes

2.3.1 Further explanation of each of the Proposed Development Changes is provided below and updates to **Chapters 1-7** of the submitted ES resulting from these changes are described in **Section 3.0**. Alternatives considered to avoid each change are also presented in **Section 3.0**.

Change 1 - Extension of Waterborne Transport Offloading Area to incorporate land within the River Trent (Work No. 1C)

2.3.2 An increase in the extent of land included in the Order Limits within the River Trent which would be utilised by delivery vessels is proposed in order to accommodate the largest (82m long) potential vessels, as used during the Keadby 2 Power Station construction. Where vessels are required to be moored for the full tide cycle, they could require use of the seabed, which is Crown Land and as such, it is intended to negotiate voluntarily for rights for this. The proposed Order Limits are presented in **Figure 3.1** and **Figure 3.2** of ES Addendum Volume III (**Application Document Ref. 6.4.2 – Rev 02** and **6.4.3 – Rev 02**). An updated Site Location Plan is presented as **Figure 1.1** of ES Addendum Volume III (**Application Document Ref. 6.4.1 – Rev 02**).

2.3.3 Change 1 does not involve any works of development and ensures that the Land Plans (**Application Document Ref. 4.2**) and Works Plans (**Application Document Ref. 4.3**) are consistent with the position described in the submitted Navigational Risk Assessment [**APP-086**].

Change 2 - Changes to the Additional AIL Route (Work No. 10A) (Contractor/ outage compound area, east of Keadby 1 Power Station and north of Keadby 1 Power Station) all within land under the control of the Applicant

2.3.4 The Proposed Development incorporates an existing temporary haulage route including two ditch crossings (Additional AIL Route) constructed for and used during Keadby 2 Power Station construction to accommodate AIL arriving at Railway Wharf. The Proposed Development proposes to retain and use this temporary haul route for AIL arriving at the Waterborne Transport Offloading Area (**Work No. 10B**), in order to minimise the impact of construction on the local road network and allow waterborne transport of AIL according with national planning policy.

2.3.5 A northern extension to the Additional AIL Route (**Work No. 10A**) is proposed to avoid reliance on routing all AIL through the operational Keadby 2 Power Station site so as to minimise health, safety and environmental risks which could otherwise affect the construction timescale and the speed of deployment of this nationally significant infrastructure.

- 2.3.6 The existing Haul Route Plans (**Application Document Ref. 4.19**) have been updated to encompass the extension to the Additional AIL Route and these accompany the material change application submitted on 5 April 2022 (**Application Document Ref. 4.19 – Rev 02**).
- 2.3.7 The extension to the Additional AIL Route would incorporate temporary use of a section of Keadby 1 Power Station outage/ contractor compound. Demolition/ relocation of a number of small existing Keadby 1 Power Station buildings/ offices within this area may be required. From the Keadby 1 Power Station outage/ contractor area east of Keadby 1 Power Station, an extension to the existing Additional AIL Route would be constructed. The route would seek to avoid loss of and disturbance to existing vegetation where possible, although where permanent loss of vegetation is unavoidable, compensation/ enhancement of biodiversity including replacement planting is proposed. Temporary steel bridges will be used to span two drainage ditches (as was the case during the construction of Keadby 2 Power Station).
- 2.3.8 Abnormal loads would use the extended Additional AIL Route, passing to the north of Keadby 1 Power Station before crossing Chapel Lane. AIL would then use existing internal roads within the Keadby 1 Power Station site before re-joining the existing Additional AIL Route along Bonnyhale Road which provides access to the Proposed PCC Site.
- 2.3.9 Following completion of construction, re-instatement and enhancement of habitats within the Additional AIL Route would be undertaken as part of the overall landscape and biodiversity management and enhancement proposals (**Work No. 11A**) shown in **Application Document Ref. 4.15 – Rev 02**. The Landscape and Biodiversity Management and Enhancement Plan (LBMEP) (**Application Document Ref. 5.10 – Rev 02**) provides further detail on the measures proposed and includes a Tree Survey and Arboricultural Impact Assessment.
- 2.3.10 The Additional AIL Route requires an increase in the extent of land included in the Order Limits (**Work No. 10B**). The Additional AIL Route is presented in **Figure 3.3: Work Areas** referred to in the ES Addendum in ES Addendum Volume III (**Application Document Ref. 6.4.4 – Rev 02**).

[Change 3 - Increase to the maximum parameters \(height\) for up to two absorbers/ stacks](#)

- 2.3.11 Ongoing engagement with the design contractors has identified that in the event that the option for up to two absorbers is required for the removal of CO₂ from flue gases within the CCP (**Work No. 1C**), the twin absorber units and stacks may have maximum dimensions up to 80m above ground level (AGL) for the absorber towers and up to 15.5m for the stacks i.e. up to 95.5m AGL, which equates to a maximum of 98.3m Above Ordnance Datum ('AOD') for each absorber and associated stack. The maximum dimensions established through ongoing design development are up to 22m higher than those previously

assessed in the submitted ES for up to two absorbers/ stacks (denoted in italics in Table 1 below). This change is within the Order Limits (**Work No. 1C**).

Change 4 - Increase to the maximum parameters (height) for carbon dioxide stripper column

2.3.12 Ongoing design development with design contractors has also identified that the proposed CO₂ stripper column (also **Work No. 1C**) may have maximum dimensions up to 63m AGL which equates to a maximum of 65.8m AOD and which is 10m higher than was included as a parameter in the draft DCO submitted with the Application [**APP-005**].

2.3.13 Table 1 sets out the updated parameters that have been assessed within this ES Addendum for up to two absorbers/ stacks and the CO₂ stripper. As both the twin absorbers and CO₂ stripper column are located within the Proposed PCC Site, these parameters take into account the expected revised minimum finished floor design level of +2.8m above ordnance datum (AOD) for CCP infrastructure within the Proposed PCC Site, as set out in **Appendix 12A: Flood Risk Assessment - Additional Submission - 6.3.20 ES [AS-010]** accepted by the Examining Authority.

Table 1: Main dimensions for up to two absorbers and carbon dioxide stripper*

Component	Length (m)	Width (m)	Height (m) AGL	Height (m) AOD
Minimum design level (final ground height) within 'Main Site' for CCGT/ CCP infrastructure (Work No. 1A/ 1C) and administration/ control buildings (Work No. 1E)	2.8m (2.6m)			
Absorbers (Work No. 1C) (in the case that two absorbers are developed)		19.0 – no change	Up to 80.0 (57.8)	82.8 (60.6)
Twin absorber stacks (Work No. 1C) (in the case	-	6.7 – no change	95.5 (75.8)	98.3 (78.6)

Component	Length (m)	Width (m)	Height (m) AGL	Height (m) AOD
that two absorbers are developed)				
Carbon dioxide stripper (Work No. 1C)	-	15.0 – no change	63.0 (52.8)	65.8 (55.6)

*previously assessed in submitted ES (*in italics*)

2.3.14 Within the Rochdale Envelope of up to two absorber towers/ stacks, alternative configurations have been considered, but as this is a 'First of a Kind' project, in the event that up to two absorbers are required from an engineering/ constructability perspective, there are no reasonable alternatives that can be assessed. This change is within the Order Limits (**Work No. 1C**).

Change 5 - Increase in proposed soil import volumes

2.3.15 Ongoing design development and engagement with design contractors has identified that additional volumes of soil may need to be imported to provide a suitable platform for foundations and buildings/ equipment across the Proposed PCC Site, taking into account anticipated ground conditions and the revised finished floor level noted in Table 1 (revised from 2.6m AOD to up to 2.8m AOD). Up to 180,000m³ of soils may need to be imported representing an increase of 50,000m³ over the volume previously assessed in the ES. This change is within the Order Limits (**Work No. 1**).

3.0 CHANGES TO THE SUBMITTED ENVIRONMENTAL STATEMENT

3.1 Introduction

3.1.1 This chapter of the ES Addendum describes the changes to the initial chapters of the submitted ES submitted with the Application which result from the Proposed Development Changes or are otherwise relevant in the context of this ES Addendum.

3.2 Changes to Chapters 1-7 of the Submitted ES

Chapter 1 – Introduction

3.2.1 Paragraph 1.3.8 of **Chapter 1: Introduction** (ES Volume I) [**APP-044**] explains that the Proposed Development Site is located within the wider Keadby Power Station site, to the west of Keadby 2 Power Station. Keadby 2 Power Station is now under commissioning (the construction activities that were reported as ongoing in the ES are now complete).

3.2.2 Paragraph 1.3.8 of **Chapter 1: Introduction** (ES Volume I) noted that the Proposed Development Site encompasses an area of approximately 69.4 hectares (ha) of which approximately 20.7ha comprises the temporary construction laydown areas. The Proposed Development Changes and related order limit changes have increased the Proposed Development Site by 0.4ha – the area of the Proposed Development Site is therefore 69.8ha.

3.2.3 The Proposed Development Changes including alterations to the extent of land required for the Proposed Development and increased parameters described in this ES Addendum have been subject to consultation with relevant consultation bodies, landowners and the general public. Section 1.6: Consultation of **Chapter 1: Introduction** is therefore updated by **Section 5.0** of this ES Addendum to describe the approach that has been undertaken in respect of consultation. Feedback received from all consultees along with a summary of matters raised during consultation, have informed the approach to and the findings presented in this ES Addendum. The approach to consultation and how the Applicant has had regard to the responses received is more fully documented within the Consultation Report submitted with the material change application (**Document Ref. 5.1 – Rev 02**) and summarised in each technical chapter (**Chapters 8-19**) of Volume II of this ES Addendum.

3.2.4 There are no further changes to **Chapter 1: Introduction** (ES Volume I) of the ES.

Chapter 2 – Assessment Methodology

3.2.5 The general assessment methodology and topic-specific methodologies, relevant legislation, policy and guidance, key assumptions and limitations set

out in Chapter 2: Assessment Methodology (ES Volume I) [APP-045] remain unchanged with minor exceptions.

Table 2: Assessment Years and Assessment Scenarios: Temporal Scope of Assessment

Submitted ES text	ES Addendum text
<p>2.6.2 The 'existing baseline' date is 2020/ 2021 since this is the period in which the baseline studies for the EIA have been undertaken. 'Future baseline' conditions are also predicted for each assessment scenario, whereby the conditions anticipated to prevail at a certain point in the future (assuming the Proposed Development does not progress) are identified for comparison with the predicted conditions with the Proposed Development. This can include the introduction of new receptors and resources into an area, or new development schemes that have the potential to change the baseline, where these form committed developments.</p>	<p>The 'existing baseline' date is 2020 - 2022 since this is the period in which the baseline studies for the EIA have been undertaken including ecological walkover surveys completed to assess impacts and effects of the Proposed Development Changes including changes to the Order Limits. 'Future baseline' conditions are also predicted for each assessment scenario, whereby the conditions anticipated to prevail at a certain point in the future (assuming the Proposed Development does not progress) are identified for comparison with the predicted conditions with the Proposed Development. This can include the introduction of new receptors and resources into an area, or new development schemes that have the potential to change the baseline, where these form committed developments.</p>

3.2.6 There are no further changes to **Chapter 2: Assessment Methodology** (ES Volume I) of the ES.

Chapter 3 – The Site and Surrounding Area

3.2.7 The description of the Proposed Development Site set out in **Chapter 3: The Site and Surrounding Area** (ES Volume I) [APP-046] remains unchanged with minor exceptions to describe areas where the Order Limits have been updated.

3.2.8 Land within the River Trent is included in the Order Limits (**Work No. 10C**) to enable mooring of vessels during loading/ unloading at the Waterborne Transport Offloading Area (**Work No. 10B**), where the largest vessels are required to be moored for the full tide cycle; in such cases, and as happened during deliveries for Keadby 2 Power Station, vessels could be required to rest

during a tide cycle on the river bed (Crown Land) although as an active port, small numbers of vessels do rest on the river bed when moored and the proposed use is considered routine and entirely consistent with current practices at the Wharf as a commercial port facility.

3.2.9 Paragraph 3.2.23 is updated to describe the Additional AIL Route (**Work No. 10A**) which will be modified. A northern extension to the Additional AIL Route would be constructed across the existing outage/ contractor compound (predominantly existing hardstanding and buildings) and would cross the amenity grassland road verges of Trent Road before following the alignment of a narrow strip of semi-improved grassland between the boundary fence of the Keadby 1 Power Station and National Grid land to the north. Here the Additional AIL Route crosses existing services including the Keadby 1 Cooling Water inlet/ outlet and further information on construction in these areas is presented in **Chapter 5** – Construction Programme and Management of this ES Addendum (**Section 3.2**). The Haul Road Plans (**Application Document Ref. 4.19 – Rev 02**) provide further detail.

3.2.10 The Additional AIL Route would extend west and cross Chapel Lane where it would intersect a number of trees that would require removal or protection, as described in the **LBMEP – Application Document Ref. 5.10 – Rev 02**. The Order Limits along Chapel Lane remain unchanged from those submitted with the Application. An existing perimeter fence associated with the Keadby 1 Power Station disused fuel oil tanks will require removal and reconstruction to facilitate access. From here, the Additional AIL Route would connect to the existing Additional AIL Route (**Work No. 10A**).

3.2.11 There are no further changes to **Chapter 3: The Site and Surrounding Area** (ES Volume I).

[Chapter 4 -The Proposed Development](#)

3.2.12 Paragraph 4.1.1 in **Chapter 4: The Proposed Development** (ES Volume I) [**APP-047**] explains that the Proposed Development comprises the construction, operation and maintenance of a low carbon CCGT generating station with a capacity of approximately 910MW gross electrical output. The Proposed Development Changes do not alter nature of the proposed development, the output capacity of the generating station, the description of operation of the Proposed Development or the responsibilities of the Applicant and third parties described within **Chapter 4: The Proposed Development** or the submitted ES.

3.2.13 Paragraph 4.2.1 in **Chapter 4: The Proposed Development** (ES Volume I) describes the Work Areas for the Proposed Development. The description of **Work No.10A** is revised by this ES Addendum to read:

- temporary retention, construction and subsequent removal of existing temporary haulage route (**Work No. 10A** – Additional Abnormal Indivisible

Load Route) including demolition and reinstatement of several small existing buildings associated with the Keadby 1 Power Station, construction of a northern Additional AIL Route and the inspection and repair of the existing jetty, and temporary placement of mobile cranes including the temporary oversailing of crane arms (**Work No. 10B** – Waterborne Transport Offloading Area; and inclusion of land within the River Trent (**Work No. 10C**) which will be required for the mooring of vessels at the Waterborne Transport Offloading Area).

3.2.14 Paragraph 4.2.2 is revised to explain that associated development, within the meaning of the 2008 Act, includes partial demolition of buildings, storage/ removal of materials within temporary laydown areas resulting from demolition and restoration works to restore the fabric of the existing buildings, or buildings demolished.

3.2.15 Paragraph 4.2.4 is updated to refer to the areas of the Proposed Development Site described above being shown in **Figure 3.3**: Work Areas referred to in the ES Addendum in ES Addendum Volume III (**Application Document Ref. 6.4.4 – Rev 02**). The indicative Site Layout Plan for the single large absorber (**Figure 4.1** in the submitted ES - **APP-016**) is now included as **Figure 4.1a** (ES Addendum Volume III - **Application Document Ref. 6.4.7 – Rev 02**) (the content of which remains unchanged from **APP-016**. The indicative Site Layout Plan for up to two absorbers is included as **Figure 4.1b** (ES Addendum Volume III - **Application Document Ref. 6.4.7 – Rev 02**).

3.2.16 Paragraph 4.2.10 is updated to reflect the revised status (as reported on the Planning Inspectorate (PINS) website at the time of preparing this ES Addendum) of the Humber Low Carbon Pipelines (HLCP) Project (into which CO₂ from the Proposed Development is proposed to be transferred) which concluded the first round of non-statutory consultation on 22 October 2021, presenting two route option configurations (the A3 and A4 pipeline corridor options) each of which would provide connection to the Proposed Development Site.

3.2.17 Paragraph 4.2.10 is also updated to reflect the current status of the DCO application for the HLCP Project and the permitting of the carbon dioxide storage proposals being progressed by the Northern Endurance Partnership (NEP). According to the most recent information (February 2022) provided on PINS website, the timeline for HLCP DCO application scoping, statutory consultation, development of the Preliminary Environmental Information (PEI) Report and application submission is being developed. EIA scoping is planned for late March/ early April 2022 in advance of the Department for Business, Energy and Industrial Strategy (BEIS) announcements regarding cluster sequencing and emitters. Statutory consultation would follow and is planned in the summer of 2022.

3.2.18 Permitting in relation to the NEP carbon dioxide storage proposals is being progressed in parallel, with offshore survey work taking place in 2021 to support

assessments and publication in October 2021 of the offshore EIA Scoping Report (bP Exploration Operating Company Limited, 2021). The HLCP Scoping Report notes that *'bp expects to submit the [offshore] ES in Q1/Q2 2022 with a view to obtaining approval for the Development in 2023. Based on current schedule estimates, bp expects installation of the pipelines and seabed infrastructure (including manifolds) to commence in 2024 with drilling of the wells into the Endurance Store expected to commence in 2025. First CO₂ injection is anticipated in 2026.*

- 3.2.19 There are no further changes in relation to the Proposed Development section of the ES.
- 3.2.20 In relation to Section 4.3 – Components of the Proposed Development of **Chapter 4: The Proposed Development (ES Volume I)**, the requirement for and proposed operation of up to two absorber columns/ stacks and CO₂ stripper is included in the process description. As such, no further updates are required, although for completeness, reference to updated figures and drawings in this ES Addendum to illustrate the increased maximum parameters include:
- A new drawing showing the indicative Site Layout Plan for up to two absorbers - **Figure 4.1b (ES Addendum Volume III - Application Document Ref. 6.4.7 – Rev 02)**; and
 - To facilitate the reader's interpretation of the Proposed Development Change 3 (increased height of up to two absorbers columns/ stacks) and Change 4 (increased height of CO₂ stripper) new wireline imagery illustrating the Proposed Development (**Application Document Ref 6.4.50 – 6.4.55 - Figures 14.19 – 14.24**) using the indicative layout shown in Figure 4.1a and Figure 4.1b (ES Addendum Volume III - **Application Document Ref. 6.4.7 – Rev 02**) has been prepared.
- 3.2.21 **Application Document Ref. 4.7: Indicative Proposed Power and Carbon Capture Layout, Elevations and Sections – Rev 02** also accompanies the material change application to reflect the Proposed Development Changes.
- 3.2.22 Paragraph 4.3.63 is updated to reflect that construction traffic movements are described in **Chapter 5: Construction Programme and Management (ES Volume I - Application Document Ref. 6.2.5)** and with further reference to Section 3.0 of this ES Addendum.
- 3.2.23 Paragraph 4.3.64 is updated to note that the landscaping, planting and biodiversity enhancement works as defined in the draft DCO (**Application Document Ref. 2.1**) as **Work No. 11A** have been updated to take into account both the Proposed Development Changes but also the conclusions of the updated Biodiversity Net Gain (BNG) assessment made in accordance with current good practice (Biodiversity Metric 3.0). **Application Document Ref. 4.3 – Works Plans – Rev 02** presents the updated proposals in relation to **Work No. 11A**, and **Application Document Ref. 4.15 – Indicative**

Landscaping and Biodiversity Plan Rev 02 provides further detail on the proposals.

- 3.2.24 Paragraph 4.3.65 is amended to reflect the updates to the Landscaping and Biodiversity Management and Enhancement Plan (**Application Document Ref. No. 5.10 – Rev 02**) that have been undertaken to accompany the material change application. This updated document sets out the principles of habitat creation, management and enhancement and of landscape design that will be adopted in the detailed design process and the areas of the Proposed Development Site allocated for this purpose, as well as the existing areas of planting including trees to be retained, protected and managed. Implementation of the proposed measures would be secured by a Requirement of the draft DCO (**Application Document Ref. 2.1**).
- 3.2.25 Paragraph 4.3.68 is amended to note that the final design will be within the parameters assessed within the submitted ES, or where relevant as updated in Table 3 of this ES Addendum and presented in the draft DCO (**Application Document Ref. 2.1**). The evolution of the Proposed Development to date is outlined in **Chapter 6: Consideration of Alternatives** (ES Volume I - **Application Document Ref. 6.26**) [APP-049] and Section 3.2 of this ES Addendum, in respect of the five Proposed Development Changes.
- 3.2.26 Paragraph 4.3.69 of **Chapter 4: The Proposed Development** (ES Volume I - **Application Document Ref. 6.2.4**) refers to Table 4.1 which sets out the maximum design parameters (including limits of deviation). Table 4.1 of the submitted ES is updated by Table 3 of this ES Addendum (ES Addendum Volume I) to reflect the proposed design parameter changes resulting from the Proposed Development Changes.
- 3.2.27 Paragraph 4.3.72 is amended to reflect that the parameters assessed in the ES for the Proposed Development, which includes this ES Addendum are updated, where relevant by the revised maximum parameters set out in Table 3 below. For buildings and structures within the Proposed PCC Site, these parameters take into account the expected minimum revised finished floor design level of +2.8mAOD for CCGT/ CCP infrastructure within the Proposed PCC Site including the administration/ control building that would provide a safe place of refuge in a breach event.
- 3.2.28 Paragraph 4.3.73 is updated to refer to the indicative Site Layout Plan for a single absorber (**Figure 4.1a**) and for up to two absorbers - **Figure 4.1b** presented in ES Addendum Volume III – **Application Document Ref. 6.4.7 – Rev 02**. Updated elevations drawings are presented for the Proposed PCC Site in the **Application Document Ref. 4.7 – Rev 02**, submitted with the material change application. No other changes are noted to this paragraph.

Table 3: Maximum Design Parameters (including limits of deviation)

Component	Length (m)	Width (m)	Height (m) above ground level (AGL)	Height (m AOD)*
Minimum design level (final ground height) within 'Main Site' for CCGT/ CCP infrastructure (Work No. 1A/ 1C) and administration/ control buildings (Work No. 1E)	2.8m AOD			
Gas Turbine Hall (Work No. 1A)	22	50	31.8	34.6
Steam Turbine Hall (Work No. 1A)	50	40	34.8	37.6
Heat Recovery Steam Generator (HRSG) Building (Work No. 1A)	28	50	55.8	58.6
HRSG Stack (Work No. 1A)	Up to 8.0m diameter		84.8	87.6
Carbon Dioxide stripper (Work No. 1C)	Up to 15.0m diameter		63.0	65.8
Single Absorber (Work No. 1C)	16	43	98.8	101.6
Single Absorber Stack (Work No. 1C)	Up to 6.7m diameter		104.8	107.6
Twin Absorber (Work No. 1C)	-	19.0	80.0	82.8
Twin absorber stacks (Work No. 1C) (in the case that two absorbers are developed)	Up to 6.7m diameter		95.5	98.3
A18 Gatehouse	6	7	4	5.5

No change to the maximum parameters presented in Table 4.1 of the submitted ES denoted by shading.

- 3.2.29 Paragraph 4.3.75 is amended to note that consideration has been given to both a single large absorber (presented in Table 4.1 of **Chapter 4: The Proposed Development** (ES Volume I - **Application Document Ref. 6.2.4**) and up to two absorber (presented in Table 3 of ES Addendum Volume I) where the option of a smaller twin absorber configuration with two stacks up to 95.5m high in determining worst-case assessments.
- 3.2.30 Paragraph 4.3.76 is updated in relation to the assessment of the CCP absorber units which have been assessed at alternative locations within **Work No. 1C (Application Document Ref. 4.3)** of the Proposed PCC Site for both the single absorber and up to two absorber configurations, with different building orientations as applicable, in order to determine the worst-case impacts at different receptors. The results in **Chapter 8: Air Quality** (ES Volume I - **Application Document Ref. 6.2.8**) are updated and amended by **Chapter 8: Air Quality** of this ES Addendum (ES Addendum Volume II) to consider the worst-case from any of the modelled layouts for the single and twin absorber configurations.
- 3.2.31 Paragraph 4.3.77 is updated in relation to the assessment of effects for noise and vibration; in order to ensure that the impact assessment presented is robust and conservative, a number of plant configurations for both the single and twin absorber configurations have been assessed in order to determine a worst-case. **Chapter 9: Noise and Vibration** (ES Volume I - **Application Document Ref. 6.2**) as updated by **Chapter 9: Noise and Vibration** of this ES Addendum (ES Addendum Volume II) describes this further.
- 3.2.32 Paragraph 4.3.78 relates to the assessment of effects on landscape and visual amenity and setting effects on built heritage receptors. The paragraph is updated noting that the assessment is based upon the largest possible dimensions for the Proposed Development, and a worst-case stack height of up to 105m AGL (107.5m AOD), as these are considered most likely to result in significant effects and represent the worst-case scenario. Notwithstanding this, effects of the smaller twin absorber configurations have also been assessed. The maximum dimensions are based upon the widest building footprint and tallest potential height as detailed in Table 4.1 of **Chapter 4: The Proposed Development** (ES Volume I - **Application Document Ref. 6.2.4**). **Chapter 14: Landscape and Visual Amenity** and **Chapter 15: Cultural Heritage** (ES Volume I - **Application Document Ref. 6.2**) including the related **Chapter 14: Landscape and Visual Amenity** and **Chapter 15: Cultural Heritage** of this ES Addendum (ES Addendum Volume II) describe this further.
- 3.2.33 There are no further changes to **Chapter 4: The Proposed Development** (ES Volume I) including relating to operations or decommissioning as a result of the Proposed Development Changes.

Chapter 5 - Construction Programme and management

- 3.2.34 Paragraph 5.1.1 of **Chapter 5: Construction Programme and Management** (ES Volume I) [**APP-048**] is updated noting that references to 'Work No.' in th ES, including this ES Addendum, are to the corresponding work numbers in Schedule 1 of the draft DCO (**Application Document Ref. 2.1**) and the location of each Work No. within the Proposed Development Site shown on **Document Ref. 4.3: Works Plans – Rev 02**. These plans are updated for the Proposed Development Changes and submitted with the material change application.
- 3.2.35 The construction timing/ programme reported in Section 5.2 of **Chapter 5: Construction Programme and Management** is not changed as a result of the Proposed Development Changes; construction of the Proposed Development could (subject to the necessary consents being granted and an investment decision being made) potentially start shortly after a consent being granted, although a more likely programme would be early in 2023. Paragraph 5.2.4 is more generally updated to note that movement of material from the Proposed PCC Site that was temporarily stored for Keadby 2 Power Station construction is now complete.
- 3.2.36 Paragraph 5.3.2 explains the approach proposed in relation to the delivery of more significant modules – these being transported by ship along the River Trent to the Waterborne Transport Offloading Facility (**Work No. 10B**) prior to being unloaded by temporary mobile cranes onto suitable haulage vehicles and transported into the Proposed PCC Site using the Additional Abnormal Indivisible Load (AIL) Route (**Work No. 10A**). The Proposed Development Changes are entirely consistent with this approach, recognising that:
- inclusion of land within the River Trent (**Work No. 10C**) is also required for the mooring of the largest vessels at the Waterborne Transport Offloading Area; and
 - the Additional AIL Route (**Work No. 10B**) requires alteration to the Order Limits to avoid reliance on routeing all AIL through the Keadby 2 Power Station site, due to this being an operational power station with the potential for health, safety and environmental risks which is extended by the Proposed Development Changes.
- 3.2.37 **Document Ref. 4.3: Works Plans – Rev 02** submitted with the Application illustrate the land temporarily required for these purposes.
- 3.2.38 Paragraph 5.3.3 refers to the designated transport routes outlined within the Framework Construction Traffic Management Plan (CTMP) (**Application Document Reference 7.2**). This paragraph is updated to refer to the Framework CTMP (**Application Document Reference 7.2 – Rev 02**) which has been updated to reflect the alterations to the Additional AIL Route as a result of the Proposed Development Changes. The Final CTMP will be prepared by the EPC Contractor(s) in accordance with the Framework CTMP

and secured through a requirement of the Draft DCO (**Application Document Ref. 2.1**).

3.2.39 The Proposed Development Changes amend paragraph 5.4.1 in relation to construction equipment. For the purposes of this ES Addendum (and in particular for the noise and vibration assessment presented in **Chapter 9: Noise and Vibration** (ES Addendum Volume II - **Application Document Ref. 6.2.9 – Rev 02**), the reasonable worst-case estimates of the types and numbers of plant and machinery likely to be used at the Proposed Development Site during the construction period have been updated to consider the extension to the Additional ALL Route, including potential use of sheet piling for foundations of a temporary piled bridge structure required to minimise risk to the integrity of the existing Keadby 1 Power Station cooling water pipework lines and other services in this area.

3.2.40 Paragraph 5.4.7 is updated to reflect the change to the importation of an additional up to 50,000m³ of soil. Ongoing design development and engagement with design contractors has identified that additional volumes of soil may need to be imported to provide a suitable platform for foundations and buildings/ equipment across the Proposed PCC Site, taking into account anticipated ground conditions and the revised finished floor level (up to 2.8m AOD). There is no change to the up to 65,000m³ of soils that may need to be removed and up to 180,000m³ of soils may need to be imported. These materials would be removed from/ delivered to the Proposed Development Site via HGV using the access from the A18. It is envisaged that the material movement would take place over a two month period – see **Chapter 10: Traffic and Transport** (ES Addendum Volume II – **Application Document Ref. 6.2.10 – Rev 02**). The soil management practices detailed in the Framework Construction Environmental Management Plan (CEMP) (**Application Document Ref. 7.1**) including re-use of excavated materials described in paragraph 5.4.8 – 5.4.19 are not changed by the Proposed Development Changes.

3.2.41 The design changes are not expected to have any impact on the following sections described up to paragraph 5.4.59 of **Chapter 5: Construction Programme and Management**:

- Main Civil and Process Works;
- Construction of Gas Connection and Above Ground Installation;
- Construction of Water Supply Connections;
- Water Discharge Connections;
- Electrical Connections;
- Construction Staff; and
- Construction Working Hours.

3.2.42 In relation to construction traffic and site access, paragraphs 5.4.62 – 6.4.63 are changed as follows:

Submitted ES text	ES Addendum text
<p>5.4.62 HGV delivering construction materials would also access the Proposed Development Site from the site entrance off the A18, with all HGV arriving and departing to/ from the west via the A18, A161 and onwards to the M180 Junction 2. The volume of HGV associated with construction of the Proposed Development on the network is predicted to be at its maximum of 624 daily two-way vehicle movements (312 in and 312 out) for 2 months during the initial 6 month Site Enabling and Preparation phase of construction once Mabey Bridge has been replaced. This traffic is associated with the anticipated cut and fill of the top layer of ground within the Proposed PCC Site Area to improve the geotechnical condition of the ground. During the remainder of the construction period, it is estimated there will be a maximum of 120 HGV trips (two-way) in months 18 – 29 (which includes the peak of construction) and 60 HGV trips (two-way) for the remainder of construction.</p> <p>5.4.63 Combining construction workforce vehicle movements with construction HGV movements over the entire construction programme shows the overall peak to occur in Months 26 and 27 when 1,236 two-way vehicle movements are anticipated (1,116 two-way car / van movements and 120 two-way HGV movements per day). Further information on traffic volumes and routing is provided in Appendix 10A:</p>	<p>5.4.62 HGV delivering construction materials would also access the Proposed Development Site from the site entrance off the A18, with all HGV arriving and departing to/ from the west via the A18, A161 and onwards to the M180 Junction 2. The volume of HGV associated with construction of the Proposed Development on the network is predicted to be at its maximum of 784 daily two-way vehicle movements (392 in and 392 out) for 2 months during the initial 6 month Site Enabling and Preparation phase of construction once Mabey Bridge has been replaced. This traffic is associated with the anticipated cut and fill of the top layer of ground within the Proposed PCC Site Area to improve the geotechnical condition of the ground. During the remainder of the construction period, it is estimated there will be a maximum of 120 HGV trips (two-way) in months 18 – 29 (which includes the peak of construction) and 60 HGV trips (two-way) for the remainder of construction.</p> <p>5.4.63 Combining construction workforce vehicle movements with construction HGV movements over the entire construction programme shows the overall peak to occur in Months 26 and 27 when 1,236 two-way vehicle movements are anticipated (1,116 two-way car / van movements and 120 two-way HGV movements per day). Further information on traffic volumes and routing is provided in Appendix</p>

Submitted ES text	ES Addendum text
Transport Assessment (ES Volume II – Application Document Ref. 6.3).	10A: Transport Assessment (ES Volume II – Application Document Ref. 6.3.10) as updated by Chapter 10: Traffic and Transport (ES Addendum Volume II) - Application Document Ref. 6.2.10 – Rev 02 .

3.2.43 Considering the above, the proposed increase in soil import to the Proposed Development Site to up to 784 two-way (392 in and 392 out) HGV accessing the site per day represents an increase of 160 two-way movements per day; however, this does not change the peak month of construction traffic as assessed within the ES **Chapter 10: Traffic and Transportation** of ES Volume I (**Application Document Ref. 6.2.10**) [APP-053]. **Chapter 10: Traffic and Transportation** of this ES Addendum (Volume II) considers the proposed change in traffic movements and concludes that there are no new or different significant construction effects to traffic and transportation as a result of the Proposed Development Change, in comparison with **Chapter 10: Traffic and Transportation** of ES Volume I (**Application Document Ref. 6.2.10**) [APP-053].

3.2.44 Paragraph 5.4.65 is updated to note that AIL would enter the Proposed Development Site via the Additional AIL Route (**Work No. 10A**) which was formerly used as a temporary AIL haul route in the construction of Keadby 2 Power Station. Following completion of Keadby 2 Power Station construction works, there may be a requirement for reinforcement/ strengthening works including replacement of temporary steel bridges to span over drainage ditches to facilitate transport of the larger abnormal loads towards the Proposed PCC Site. The new northern Additional AIL Route would incorporate temporary use of a section of Keadby 1 Power Station outage/ contractor compound. Demolition/ relocation of several small existing Keadby 1 Power Station buildings/ offices within this area may be required. From the Keadby 1 Power Station outage/ contractor area east of Keadby 1 Power Station, an extension to the existing Additional AIL Route would be constructed. Where the route of the Additional AIL Route crosses existing services including Keadby 1 cooling water pipework and other utilities, a temporary piled bridge structure would be used to minimise risk to the integrity of the existing cooling water pipework. This bridging structure would be of similar construction to those used in the Keadby 2 temporary haul route. The extension to the Additional AIL Route would use similar materials and techniques to the existing retained Additional AIL Route created for Keadby 2 Power Station construction i.e. geotextile separation membrane with granular compacted stone laid on top as illustrated on the Haul Road Plans (**Application Document Ref. 4.19 – Rev 02**).

3.2.45 The Additional AIL Route would seek to minimise loss of and disturbance to existing vegetation, although where permanent loss of vegetation is unavoidable (including a small number of semi-mature trees) compensation/

enhancement of biodiversity including replacement tree planting would be undertaken, as described in the LBMEP (**Application Document Ref. 5.10 – Rev 02**). Following completion of construction, re-instatement and enhancement of habitats within the northern Additional AIL Route would be undertaken as part of the overall landscape and biodiversity management and enhancement proposals (**Work No. 11A**). **Application Document Ref. 4.15 – Rev 02** submitted with the material change application provides further detail.

3.2.46 The design changes are not anticipated to alter the storage areas for construction plant and machinery, the use of temporary construction lighting, security, wheel wash facilities, site waste management practices or commissioning and testing. The Framework CEMP (**Application Document Ref. 7.1**) [**APP-160**] is not considered to require updates in the light of the Proposed Development Changes, although this document will remain under review, as appropriate, during the course of examination of the DCO Application.

Chapter 6 – Consideration of Alternatives

3.2.47 Paragraph 6.1.1 of **Chapter 6: Alternatives** (ES Volume I) [**APP-049**] is updated. This is to note that reasonable alternatives to the main elements of the Proposed Development, including the Proposed Development Changes set out in this ES Addendum, which the Applicant studied - and the main reasons for selecting options which resulted in the Proposed Development are also presented in this ES Addendum (Section 3.2). These are set out below.

Change 1 - Inclusion of riverbed within the Waterborne Transport Offloading Area (Railway Wharf)

3.2.48 This Proposed Development Change to the Order Limits within the River Trent involves no new significant effects and it is noted that the Navigation Risk Assessment (**Appendix 12C**) in the submitted ES (ES Volume II) already takes account of this scenario. Ongoing technical engagement and consultation with relevant navigation stakeholders has confirmed this position.

3.2.49 Temporary use during construction of a slightly larger area of river to accommodate the largest potential vessels to be used for the delivery of AIL, and inclusion of the land for mooring of the vessel on the riverbed within the Order Limits has no reasonable alternatives given that the movement of the largest abnormal loads via waterborne transport is favored over road transport methods.

3.2.50 Alternatives to the Proposed Development Change would be to make no change; this would involve restricting the size of the largest vessels that could be moored at Railway Wharf, which is likely to result in more construction being required on site and potentially more road transport movements of abnormal loads. Alternatives to this Proposed Development Change have therefore not been considered further.

Change 2 - Changes to the Additional Abnormal Indivisible Load Route, largely within the Applicant's land

- 3.2.51 The use of the route solely through Keadby 1 Power Station initially proposed remains an option to be utilised; however ongoing design development has identified that this introduces additional health and safety risks of routeing abnormal load movements through an operational Power Station site, with the potential to affect the construction timescales and therefore speed of deployment of this NSIP. Alternative routeing of the Additional AIL Route has therefore been considered comprising the northern extension of the Additional AIL Route.
- 3.2.52 Where the Additional AIL Route crosses existing services including Keadby 1 Power Station cooling water pipework corridor, a temporary piled bridge structure is proposed to minimise risk to the integrity of the existing cooling water pipework lines and other services. An alternative to the piled bridge structure was not deemed feasible.
- 3.2.53 Near Chapel Lane (within the Applicant's land) the Proposed Development Changes will require the removal of a small number of semi-mature trees located by the existing Keadby 1 Power Station tank farm on the Applicant's land, removal and replacement of fencing and street furniture on Chapel Lane and demolition of some minor existing Keadby 1 Power Station infrastructure. Alternatives to this Proposed Development Change within the vicinity of Chapel Lane have been considered, including sole use of the Additional Abnormal Load Route as proposed in the submitted Application (para 3.2.51); however, as noted, this increases the potential risks associated with abnormal loads traversing the operational Keadby 2 Power Station site.

Change 3 - Increase to the maximum heights of the carbon dioxide absorbers/stacks, if two are installed

- 3.2.54 Design development has established that the maximum height parameters for up to two absorber units and associated stacks needs to be increased by circa 20m. In the event that up to two absorbers is proposed, there are no reasonable alternatives available. The alternative to making this change would therefore be to make no change, which could restrict the technology selection of the Proposed Development.

Change 4 - Increase to the maximum heights of the carbon dioxide stripper column

- 3.2.55 Design development has established that the maximum height for the CO₂ stripper needs to be increased by up to 10m. It is considered that there are no reasonable alternatives available. The alternative to making this change would therefore be to make no change, which could restrict the technology selection of the Proposed Development.

Change 5 - Increase in proposed soil import volumes to create a suitable development platform

3.2.56 The updated Flood Risk Assessment (FRA) requires a minimum design level (final ground height) within 'Main Site' for CCGT/ CCP infrastructure (**Work No. 1A/ 1C**) and administration/ control buildings (**Work No. 1E**) of 2.8m AOD; an increase from 2.6m AOD. This will require an increase of 50,000m³ of imported soil over the volume previously assessed in the submitted ES. Given the additional land raising required for flood mitigation purposes, there are considered no viable alternatives available. No alternatives to this Proposed Development Change are available, as this is driven by the ground level increase required by the Environment Agency.

[Chapter 7 - Legislative Context and Planning Policy](#)

3.2.57 **Chapter 7: Legislative Context and Planning Policy** (ES Volume I) [**APP-070**] is updated by Section 1.2 of this ES Addendum.

4.0 ENVIRONMENTAL ASSESSMENT OF PROPOSED DEVELOPMENT CHANGES

4.1 Introduction

4.1.1 This section of the ES Addendum identifies where Proposed Development Changes have the potential to affect the likely significance of effects reported in the technical chapters of the submitted ES.

4.2 Scope and methodology for the assessment of the Proposed Development Changes

4.2.1 A preliminary environmental assessment (screening) of whether there would be any new or materially different likely significant effects on the environment, arising as a result of Proposed Development Changes has been undertaken based on the assumptions set out above, with reference to the previous assessments presented within the submitted ES (Volume I and II) [APP-043 to APP-098], as updated by other environmental information accepted by the examining authority since acceptance of the Application including:

- Additional Submission - 6.3.20 Environmental Statement **Appendix 12A: Flood Risk Assessment [AS-010]**; and
- **Document Ref. 5.12 - Habitats Regulations Assessment (HRA) Appropriate Assessment Report – Rev 02 [REP1-006]**.

4.2.2 Socio-Economics, Major Accidents and Disasters, Climate Change and assessment in relation to Waste (in relation to any material change to Response to the S51 advice – Waste Technical Note [OD-003] were scoped out of any further assessment as the Proposed Development Changes would not result in any change in effect for these topics.

4.2.3 The outcome of this scoping exercise is provided in Table 4 below.

4.2.4 Updates to technical chapters and appendices of the submitted ES, where these are required, are provided within Volume II of this ES Addendum.

Table 4: Scoping of environmental assessments for Proposed Development Changes

Submitted ES Chapter	Scoping Decision for material change application	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	Submitted ES Appendix	Scoping Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
Chapter 8: Air Quality [APP-051]	In	Changes to stack heights requiring reassessment of operational air quality effects	8A Air Quality Construction Phase [APP-069]	Out	The assessment of potential dust impacts from construction activities uses the distance from the Proposed Development Site boundary to the receptor and consideration of the nature of works proposed. As there are no new receptors being introduced closer to the Proposed Development Site boundary and no new types of activity proposed, no re-assessment is required.
			8B Air Quality Operational Phase [APP-070]	In	Changes to stack heights requiring reassessment of operational air quality effects

Submitted ES Chapter	Scoping Decision for material change application	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	Submitted ES Appendix	Scoping Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
			8C Air Quality Assessment of Amine Degradation Products [APP-071]	Out	Assessment of the twin absorber design shows no change in significance to the assessment of amines.
Chapter 9: Noise and Vibration [APP-052]	In	Changes to potential locations of piling works (for the Additional AIL Route) requiring reassessment of construction noise effects Changes to building/ stack heights for up to two absorbers requiring reassessment of operational noise and vibration effects	9A Construction Noise Assessment Methodology [APP-072]	In	Changes to locations of potential piling works (for the Additional AIL Route) requiring reassessment of construction noise and vibration effects.
			9B Operational Noise Information [APP-073]	In	Changes to building heights requiring reassessment of operational noise and vibration effects.

Submitted ES Chapter	Scoping Decision for material change application	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	Submitted ES Appendix	Scoping Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
Chapter 10: Traffic and Transportation [APP-053]	In	Changes to HGV traffic movements during construction requiring reassessment of traffic effects	10A Transport Assessment [APP-074]	Out	No change to timing of the peak of construction or to the level of effect on the road network
			10B Stage 1 Road Safety Audit [APP-075]	Out	No change – Road Safety Audit relates to A18 junction design
Chapter 11: Biodiversity and Nature Conservation [APP-054]	In	Updates to account for changes to the Order Limits and recalculation of the Biodiversity Net Gain calculations presented in the Document 5.12: LBMEP – Rev 02.	11A Biodiversity and Nature Conservation Legislation and Policy [APP-076]	Out	No change
			11B Ecological Impact Assessment Methods [APP-077]	Out	No change
			11C PEA Report (inc. Annexes and Figures 11C.1, 11C.2, 11C.3, 11C.4) [APP-078]	In	Updated to reflect the change in Order Limits

Submitted ES Chapter	Scoping Decision for material change application	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	Submitted ES Appendix	Scoping Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
			11D Confidential Badger Survey Report (inc. Figure 11D.1) [APP-079]	In	Updated to reflect the change in Order Limits
			11E Bat Survey Report (inc. Annexes and Figure 11E.1) [APP-080]	Out	No change
			11F Riparian Mammal Survey (inc. Annexes and Figure 11F.1) [APP-081]	Out	No change
			11G Aquatic Invertebrate and Flora Survey Report (inc. Annexes and Figure 11G.1) [APP-082]	Out	No change

Submitted ES Chapter	Scoping Decision for material change application	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	Submitted ES Appendix	Scoping Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
			11H Underwater Sound Effects on Fish [APP-083]	Out	No change
Chapter 12: Water Environment and Flood Risk [APP-055]	In	Updated to reflect the change in Order Limits	12A Flood Risk Assessment (inc. Annexes) [APP-084]	Out	No change
			12B Water Framework Directive Assessment Report (inc. Annexes) [APP-085]	Out	No change
			12C Navigational Risk Assessment (inc. Annexes and Figures 12C.1 – 12C.10) [APP-086]	Out	The mooring of abnormal load deliveries including use of the river bed for which the extended Order Limits is proposed in the material change application is assessed in Table 6 of the Navigation Risk Assessment

Submitted ES Chapter	Scoping Decision for material change application	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	Submitted ES Appendix	Scoping Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
					(Appendix 12C) of the submitted ES [APP-086] including consultation with relevant navigation stakeholders. This document is being updated at Deadline 5 as part of a wider suite of updates to reflect ongoing consultation and includes updated plans to show the Order Limits.
Chapter 13: Ground Conditions [APP-056]	In	Updated to reflect the change in Order Limits	13A Phase I Desk Based Assessment (inc. Annexes and Figures 13A.1 – 13A.3) [APP-087]	Out	No change
			13B Land Contamination Methodology Tables [APP-088]	Out	No change

Submitted ES Chapter	Scoping Decision for material change application	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	Submitted ES Appendix	Scoping Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
			13C Potential Areas of Contamination Further Risk and Impact Assessment [APP-089]	Out	No change
Chapter 14: Landscape and Visual Amenity [APP-057]	In	Updated to reflect the change in building heights and effects on vegetation	14A LVIA Methodology [APP-090]	Out	No change
			14B Potential Viewpoints [APP-091]	Out	No change
			14C Landscape Character – [APP-092]	Out	No change
Chapter 15: Cultural Heritage [APP-058]	In	Updated to reflect the change in Order Limits and building heights	15A Cultural Heritage Desk Based Assessment (inc. Annexes and Figure 15A.1a – Figure 15A.11) [APP-093]	Out	No change

Submitted ES Chapter	Scoping Decision for material change application	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	Submitted ES Appendix	Scoping Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
			15B Geoarchaeological Hand Auger Survey Fieldwork Report [APP-094]	Out	No change
			15C Geophysical Survey Fieldwork Report [APP-095]	Out	No change
Chapter 16: Socio-economics [APP-059]	Out	The proposed changes have no effect on any of the socio- economic assessment criteria and therefore do not alter the findings on the ES as submitted	16A Population and Health Signposting [APP-096]	Out	The proposed changes have no effect on human health and therefore do not alter the findings on the ES as submitted
Chapter 17: Climate Change [APP-060]	Out	No new significant changes or changes in magnitude identified Climate Change.	17A Sustainability Review [APP-097]	Out	No new significant changes to overall sustainability. Therefore, no further assessment is required

Submitted ES Chapter	Scoping Decision for material change application	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	Submitted ES Appendix	Scoping Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
		Therefore, no further assessment is required			
Chapter 18: Major Accidents and Disasters [APP-061]	Out	The proposed changes have no effect on any of the MAD assessment criteria and therefore do not alter the findings in the ES assessment	-	-	-
Chapter 19: Cumulative and Combined Effects [APP-062]	In	Updated to reflect the change in Order Limits and Proposed Development Changes. A refresh of the long list to take into consideration other potential developments has also been undertaken.	-	-	-

Submitted ES Chapter	Scoping Decision for material change application	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	Submitted ES Appendix	Scoping Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
Chapter 20: Summary of Likely Significant Residual Effects [APP-063]	In	Updated to reflect the findings of ES Addendum.	20A Schedule of Commitments [APP-098]	Out	No updates required.
Additional Submission – Waste [OD-003]	Out	Scoped out of further assessment due to no change to quantities of exported soil or other relevant material	-	-	-

5.0 CONSULTATION

5.1 Overview

5.1.1 Informal (non-statutory) consultation on the Proposed Development Changes has been undertaken by the Applicant, following agreement on the approach with North Lincolnshire Council, and advice provided by the Planning Inspectorate on 9 February 2022 [PD-011].

5.1.2 This informal consultation has encompassed:

- early meetings (January/ February 2022) and discussions with North Lincolnshire Council, as local planning authority;
- informal consultation with the local community within the immediate vicinity of the Site in March 2022, including two public information days; and
- informal consultation in February/ March 2022 with the relevant stakeholders.

5.1.3 The approach to consultation and how the Applicant has had regard to the responses received is more fully documented within the Changes Application Consultation Statement (**Document Ref 10.3**). Table 5 provides a summary of matters raised during consultation relevant to this EIA Addendum. These in turn are summarised in each technical chapter of the ES Addendum (ES Addendum Volume II).

Table 5: Summary of Consultation Relevant to the EIA Addendum

Consultee or Organisation	Date and Nature of Consultation	Summary of Response
Health and Safety Executive (HSE)	22 February 2022	HSE note that the three proposed extensions to the order limits do not change their advice as previously given.
Doncaster Sheffield Airport	23 February 2022	Doncaster Sheffield Airport has No Objection to the proposed changes.
Ministry of Defence (MoD)	24 February 2022	MoD note that in order to avoid a potential obstruction hazard to low flying training activities, the Proposed development's tallest structures (absorber columns, HRSG Building, HRSG Stack, CO ₂ Stripper) need to be fitted with MOD accredited omni-directional red lighting.

Consultee or Organisation	Date and Nature of Consultation	Summary of Response
National Highways	28 February 2022	National Highways made no comment on any of the Proposed Development Changes except Change 2, noting that Routes for AIL will be considered nearer the time, and Change 5, noting their expectation that HGV numbers will be included in the CTMP prior to commencement.
NATS	28 February 2022	NATS confirm that the Proposed Development Changes will have no impact on their operations and infrastructure.
Amcotts Parish Council	07 March 2022	The Parish Council raise concerns over height of stacks, worsening of light pollution due to Proposed Development Changes and potential disruption to traffic through Keadby.
Associated British Ports (ABP)	07 March 2022	ABP wish to organise further consultation with the Applicant to discuss the proposed order limits and the implications of including the riverbed within the waterborne transport offloading area and the implications.
North Lincolnshire Council Archaeology (NLC)	09 March 2022	NLC suggest that Change 2, changes to the AIL route, has the potential to impact previously unrecorded archaeological remains of prehistoric to Roman date, therefore further field evaluation is required. They suggest this could be done through adding Change 2 to the scope of the upcoming archaeological trial trenching under the Rule 17 Response for Heritage.
Environment Agency (EA)	14 March 2022	If Change 1 proposes permanent features, the Environment Agency request further information. They would also welcome further discussions regarding the mitigation of temporary steel bridges and information of timings proposed for Change 2.
Natural England	14 March 2022	Natural England suggest the HRA should be updated to reflect the Proposed Development Changes; they provide advice

Consultee or Organisation	Date and Nature of Consultation	Summary of Response
		on the additional assessment work required for this.
Humberside Fire & Rescue Service	15 March 2022	Humberside Fire & Rescue have no concerns with the Proposed Development Changes. They reiterate that where it is a requirement to provide access for high reach appliances, the route and hard standing should be constructed to provide a minimum carrying capacity of 24 tonnes. They also reiterate that, under normal circumstances, hydrants in industrial units and high risk areas should be at 90m intervals.
Trinity House	18 March 2022	Trinity House has no comments regarding the Proposed Development Changes.
Historic England	19 March 2022	Historic England made no comments on any of the Proposed Development Changes, except they seek to confirm that no additional dredging/ channel modification works are required for Change 1 and suggest Change 5 could potentially increase impacts if new borrow pits are required or storage areas / footprints of platforms increase (though this is not indicated in documents).
Maritime and Coastguard Agency (MCA)	20 March 2022	The MCA has no comments on the Proposed Development Changes, providing that the NRA is updated in light of such changes. They remind the Applicant of the Port Marine Safety Code (PMSC) and their Guide to Good Practice.
UK Health Security Agency	21 March 2022	The UKHSA suggest that without reviewing the updated ES Air Quality Chapter (and associated technical appendices) they cannot comment on the impact of the Proposed Development Changes.
North Lincolnshire Council	24 March 2022	NLC state that the inclusion of riverbed within the Waterborne Transport Offloading Area will need to be addressed in the Habitats Regulations Assessment.

Consultee or Organisation	Date and Nature of Consultation	Summary of Response
North Lincolnshire Council	24 March 2022	NLC state that with regards to the proposal to increase the volume of imported soils by up to 50,000 cubic tonnes the Local Highway Authority would like to see further clarification around vehicle movements assumed within the Rochdale Envelope assessment provided in the ES.
North Lincolnshire Council	24 March 2022	NLC state that the increase to the maximum heights of the carbon dioxide absorbers/stacks, if two are installed, and the increase to the maximum heights of the carbon dioxide stripper column will need to be addressed in the Landscape and Visual Impacts Assessment.

5.2 Summary of consultation

- 5.2.1 The Consultation Report (Proposed Development Changes: Consultation Statement) is submitted alongside this ES Addendum.
- 5.2.2 The Applicant carried out a consultation on a number of Proposed Development Changes to the Proposed Development between 17 February 2022 and 20 March 2022.
- 5.2.3 The Applicant consulted Statutory Consultees and Landowners via letter and email and the local community via a mixture of methods including the first public information events related to the Proposed Development.
- 5.2.4 The Applicant has reviewed the feedback received and shown due regard to relevant responses as set out in Table 5 above.
- 5.2.5 The consultation is therefore considered to fulfil the criteria set out in Advice Note 16 and the ExA's Response to Applicant's letter dated 1 February 2022 [PD-011].