

# The Keadby 3 Low Carbon Gas Power Station Project

**Document Ref: 5.5** 

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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

# Planning Statement (Deadline 3 Version)

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

Regulation 5(2)(q)

Applicant: Keadby Generation Limited Date: February 2022



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## GLOSSARY

Abbreviation	Description	
2008 Act / PA 2008	The Planning Act 2008	
Action Plan	Clean Growth – The UK Carbon Capture Usage and Storage deployment pathway - An Action Plan	
AGI	Above Ground Installation	
AIL	Abnormally Indivisible Load	
ALARP	As low as is reasonably practicable	
Allocations DPD	North Lincolnshire Local Development Framework Housing and Employment Land Allocations Development Plan Document	
APFP Regulations	Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended)	
Applicant	Keadby Generation Limited	
CAA	Civil Aviation Authority	
CCC Report	Net Zero – The UK's Contribution to Stopping Global Warming (CCC, 2019)	
ССР	Carbon Capture Plant	
CCR	Carbon Capture Ready	
CCS	Carbon Capture and Storage	
CCUS	Carbon capture, usage and storage	
CEMP	Construction Environmental Management Plan	
CGS	Clean Growth Strategy	
CHP	Combined Heat and Power	
СОМАН	Control of Major Accident Hazards	
Core Strategy	North Lincolnshire Local Development Framework Core Strategy	
CWTP	Construction Worker Travel Plan	
DAS	Design and Access Statement	
DCO	Development Consent Order	
DIO	Defence Infrastructure Organisation	
DPDs	Development Plan Documents	





EA	Environment Agency		
EII	Energy intensive industries		
EN-1	Overarching National Policy Statement for Energy		
EN-2	National Policy Statement for Fossil Fuel Electricity Generating Infrastructure		
EN-4	National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines		
EN-5	National Policy Statement for Electricity Networks Infrastructure		
EP	Environmental Permitting		
ESC	Energy Systems Catapult		
ETI	Energy Technologies Institute		
EU ETS	European Union Emissions Trading System		
EWP	Energy White Paper		
ExA	Examining Authority		
FRA	Flood Risk Assessment		
GHG	Greenhouse Gas		
GW	Gigawatt		
HDD	Horizontal directional drilling		
HSC	Hazardous Substances Consent		
HSE	Health and Safety Executive		
LBMEP	Landscaping and Biodiversity Management and Enhancement Plan		
LGS	Local Geological Sites		
Local Plan	North Lincolnshire Local Plan		
LVIA	Landscape and Visual Impact Assessment		
MW	Megawatt		
NE	Natural England		
NEP	Northern Endurance Partnership		
Net Zero Report	Net Zero - Opportunities for the power sector		
NIA 16	National Infrastructure Assessment (published July 2018)		
NIC	National Infrastructure Commission		
NIDP	National Infrastructure Delivery Plan (2016 – 2021)		
NIP 14	National Infrastructure Plan (HM Treasury, 2014)		
NLC	North Lincolnshire Council		
NPPF	National Planning Policy Framework		
NPS	National Policy Statement		





NRA	Navigational Risk Assessment	
NSIP	Nationally Significant Infrastructure Project	
NSRs	Noise Sensitive Receptors	
Order Limits	The Proposed Development Site	
PPG	Planning Practice and Guidance	
Progress Report	Reducing UK emissions: 2020 Progress Report to Parliament	
Proposed Development Site	Keadby Power Station, Trentside, Keadby, Scunthorpe DN17 3EF	
RIGS	Regionally Important Geological Sites	
SAC	Special Area of Conservation	
Site	The Proposed Development Site	
SoS	Secretary of State for Business, Energy and Industrial Strategy	
<u>SCNB</u>	Statutory Nature Conservation Body	
SPA	Special Protection Area	
SSSI	Site of Special Scientific Interest	
SWMP	Site Waste Management Plan	
TTWA	Travel to Work Area	
UK MPS	UK Marine Policy Statement	
ZCH	Zero Carbon Humber	





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# **EXECUTIVE SUMMARY**

- 1 This Planning Statement has been prepared by DWD on behalf of Keadby Generation Limited ('the Applicant') which is a wholly owned subsidiary of SSE plc. It forms part of the application (the 'Application') for a Development Consent Order (a 'DCO'), that has been submitted to the Secretary of State (the 'SoS') for Business, Energy and Industrial Strategy, under **Section 37** of 'The Planning Act 2008' (the 'PA 2008').
- 2 The Applicant is seeking development consent for the construction, operation and maintenance of a new low carbon Combined Cycle Gas Turbine Generating Station ('the Proposed Development') on land at, and in the vicinity of, the existing Keadby Power Station (the 'Proposed Development Site').
- 3 The Proposed Development is a new electricity generating station of up to 910 megawatts (MW) gross electrical output, equipped with carbon capture and compression plant and fuelled by natural gas, on land to the west of Keadby 1 Power Station and the (under construction) Keadby 2 Power Station, including connections for cooling water, electrical, gas and utilities, construction laydown areas and other associated development.
- 4 The Proposed Development falls within the definition of a 'Nationally Significant Infrastructure Project' (NSIP) under **Section 14(1)(a)** and **Sections 15(1)** and **(2)** of the PA 2008, as it is an onshore generating station in England that would have a generating capacity greater than 50MW electrical output. As such, a DCO application is required to authorise the Proposed Development in accordance with **Section 31** of the 2008 Act.
- 5 The DCO, if made by the SoS, would be known as 'The Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) Order'.
- 6 The Proposed Development will work by capturing carbon dioxide emissions from the gas-fired power station and connecting into the ZCH Partnership export pipeline and gathering network for onward transport to the Endurance saline aquifer under the North Sea.
- 7 The Proposed Development Site is located within and near to the existing Keadby Power Station site near Scunthorpe, Lincolnshire and lies within the administrative boundary of North Lincolnshire Council (NLC). The majority of land is within the ownership or control of the Applicant (or SSE associated companies) and is centred on national grid reference 482351, 411796.
- 8 Under the PA 2008 regime, the policy framework for examining and determining applications for development consent is provided by National Policy Statements ('NPSs'). **Section 5** of the PA 2008 allows the relevant SoS to designate NPSs setting out national policy in relation to the types of NSIPs listed at **Section 14** of the PA 2008. A number of NPSs have been designated in relation to energy infrastructure (NPSs EN-1 to EN-6).





- **Section 104** of the PA 2008 requires the SoS to determine applications for NSIPs in accordance with the relevant NPSs (where these are in place) and appropriate marine policy documents having regard to any local impact report produced by the relevant local planning authority; any matters prescribed in relation to development of the description to which the application relates; and any other matters which the SoS thinks are both "important and relevant" to their decision.
- 10 The primary purpose of this document is to assist the Examining Authority ('ExA') and the SoS in their assessment of the Proposed Development by demonstrating how the Applicants have taken account of relevant planning policy, notably the NPSs for energy infrastructure, and the extent to which the Proposed Development complies with the policies within those NPSs, as well as any other matters that are *"important and relevant"* to the SoS's determination of the Application, including UK Government energy and climate change policy, the National Planning Policy Framework ('NPPF') and the statutory development plan.
- 11 This document sets out the key benefits and likely significant adverse environmental effects of the Proposed Development. Where relevant this document cross references or 'signposts' the relevant application documents that provide more detail.
- 12 The relevant energy NPSs are considered at **Section 3** of this document. Part 3 of NPS EN-1 defines and sets out the 'need' for nationally significant energy infrastructure. Paragraph 3.1.1 states that the UK needs all types of energy infrastructure covered by the NPS in order to achieve energy security at the same time as dramatically reducing greenhouse gas emissions. Paragraph 3.1.2 goes on to state that the Government does not consider it appropriate for planning policy to set targets for or limits on different technologies. Notably, paragraph 3.1.3 stresses that the SoS should assess applications for relevant energy infrastructure "...on the basis that the Government has demonstrated that there is a need" (with the scale and urgency of that need being described in EN-1). Paragraph 3.1.4 confirms that the SoS should give substantial weight to the contribution that all projects would make toward satisfying this need when considering applications under the PA 2008. As such, EN-1 is clear that the need that exists for new energy infrastructure is not open to debate or interpretation.
- 13 **Section 4** of this document considers recent UK Government energy and climate change policy, which set out important Government objectives for decarbonising the power and industrial sectors in order to achieve the legally binding target of net zero by 2050 and are important and relevant considerations.
- 14 **Section 5** of this document sets out the NPPF and local policies of most relevance. Paragraph 5 of the NPPF states that the document does not contain specific policies for NSIP and that applications in relation to NSIP are to be





determined in accordance with the decision-making framework set out in the 2008 Act and relevant NPS, as well as any other matters that are considered both important and relevant. This includes the NPPF and local policy.

- 15 **Section 6** considers the conformity of the Proposed Development against the assessment principles of the relevant energy NPSs. The Applicants' assessment has not identified any conflicts with NPS policy. Furthermore, **Section 6** has demonstrated that there is no conflict with NPPF policy or local policy.
- 16 Two existing construction facilities (the 'Pilfrey laydown area' and the 'haul road') are being utilised for the Keadby 2 Power Station project, each subject to a dedicated extant planning permission, decision notices for which are appended to this document. These facilities are to be retained for use by the Proposed Development then the land subsequently restored. In order to ensure that the conditions applicable to these existing permissions are adequately reflected in the Application, similarly worded requirements are included in Schedule 2 of the Draft DCO, which reference approved material from the extant planning permissions. Article 38 of the draft DCO requires the Applicant to restore the land comprised in these two facilities in the event that the DCO is made but not implemented.
- 17 The Proposed Development will have a number of very clear and tangible benefits, including:
  - The Proposed Development is a major investment in low carbon electricity generation and could be deployed by the mid-2020s, providing 910MW (gross capacity) of dispatchable generation, a significant contribution towards the urgent national need for low carbon electricity generation established in NPS EN-1 and which has become more urgent following the legally binding target of net zero by 2050.
  - The Proposed Development would connect into and act as an important enabler of the ZCH cluster, and would help deliver Government policies and commitments on CCUS and "Superplaces".
  - The Proposed Development represents a considerable commitment to removing barriers to carbon capture, and deploying related infrastructure, and exceeds relevant policy requirements, with carbon capture and compression equipment installed from the outset.
  - The site will connect into the ZCH CCUS cluster. Large parts of the Site are within the ownership or control of the Applicant and the generating station would be situated on brownfield land adjoining and within an existing power station with existing infrastructure and connections.
  - The parameters assessed in the ES and secured in the Draft DCO provide an appropriate degree of flexibility, allowing for the future connection to the ZCH cluster and allowing for unforeseeable





technological advancements and efficiencies to be incorporated in the final design.

- Significant beneficial local and regional impacts would result from the direct, indirect and induced employment created by the construction phase of the Proposed Development.
- 18 The Proposed Development would give rise to one unavoidable adverse effect of significance and adverse performance against planning policy:
  - During the construction, operation and decommissioning of the Proposed Development there would be moderate or major adverse visual amenity effects at a number of viewpoints. These are considered unavoidable due to the scale of the required structures. The accompanying Landscape and Biodiversity Management and Enhancement presents proposals for planting, although such planting would not reduce the significance of visual effects at these locations.
- 19 In conclusion therefore, given the urgency of the need for new electricity generation capacity (as set out in NPS EN-1) and the importance of decarbonising the power and industrial sectors in the UK to meet the legally binding target of net zero by 2050, it is considered that the benefits of the Proposed Development significantly outweigh the limited harm that would result from the effects identified above and that development consent should be granted.





# 1.0 INTRODUCTION

#### 1.1 Overview

- 1.1.1 This Planning Statement (**Application Document Ref. 5.5**) has been prepared by DWD on behalf of Keadby Generation Limited ('the Applicant') which is a wholly owned subsidiary of SSE plc. It forms part of the application (the 'Application') for a Development Consent Order (a 'DCO'), that has been submitted to the Secretary of State (the 'SoS') for Business, Energy and Industrial Strategy, under **Section 37** of 'The Planning Act 2008' (the '2008 Act').
- 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 Proposed Development is a new electricity generating station of up to 910 megawatts (MW) gross electrical output, equipped with carbon capture and compression plant and fuelled by natural gas, on land to the west of Keadby 1 Power Station and the (under construction) Keadby 2 Power Station, including connections for cooling water, electrical, gas and utilities, construction laydown areas and other associated development. It is described in Chapter 4: The Proposed Development of the Environmental Statement (ES) (ES Volume I Application Document Ref. No. 6.2).
- 1.1.4 The Proposed Development falls within the definition of a 'Nationally Significant Infrastructure Project' (NSIP) under **Section 14(1)(a)** and **Sections 15(1)** and (2) of the 2008 Act, as it is an onshore generating station in England that would have a generating capacity greater than 50MW electrical output (50MWe). As such, a DCO application is required to authorise the Proposed Development in accordance with **Section 31** of the 2008 Act.
- 1.1.5 The DCO, if made by the SoS, would be known as 'The Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) Order' ('the Order').

#### **1.2 The Applicant**

1.2.1 The Applicant, Keadby Generation Limited, is the freehold owner of a large part of the Proposed Development Site and is a wholly owned subsidiary of the FTSE 100-listed SSE plc, one of the UK's largest and broadest-based energy companies, and the country's leading developer of renewable energy generation. Over the last 20 years, SSE plc has invested over £20bn to deliver industry-leading offshore wind, onshore wind, CCGT, energy from waste, biomass, energy networks and gas storage projects. The Applicant owns and operates the adjacent Keadby 1 Power Station and is in the process of constructing Keadby 2 Power Station. SSE operates the Keadby Windfarm





which lies to the north and south of the Proposed Development Site and generates renewable energy from 34 turbines, with a total installed generation capacity of 68MW.

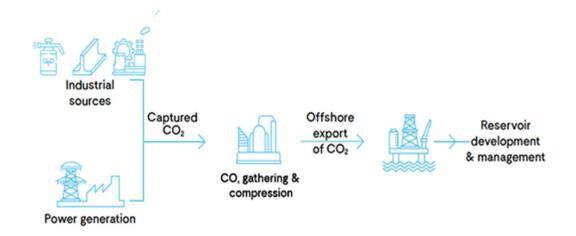
- 1.2.2 SSE has produced a 'Greenprint' document (SSE plc, 2020a) that sets out a clear commitment to investment in low carbon power infrastructure, working with government and other stakeholders to create a net zero power system by 2040. This includes investment in flexible sources of electricity generation and storage for times of low renewable output which will complement other renewable generating sources, using low carbon fuels and/ or capturing and storing carbon emissions. SSE is working with leading organisations across the UK to accelerate the development of carbon capture, usage and storage ('CCUS') clusters, including Equinor and National Grid Carbon.
- 1.2.3 The design of the Proposed Development demonstrates this commitment. The Proposed Development will be built with a clear route to decarbonisation, being equipped with post-combustion carbon capture technology, consistent with SSE's commitment to reduce the carbon intensity of electricity generated by 60% by 2030, compared to 2018 levels (SSE plc, 2020b). It is intended that the Proposed Development will connect to infrastructure that will be delivered by the Zero Carbon Humber (ZCH) Partnership and Northern Endurance Partnership (NEP) for the transport and offshore geological storage of carbon dioxide.

#### 1.3 What is Carbon Capture, Usage and Storage?

1.3.1 CCUS is a process that removes carbon dioxide emissions at source, for example emissions from a power station or industrial installation, and then compresses the carbon dioxide so that it can be safely transported to secure underground geological storage sites. It is then injected into layers of solid rock filled with interconnected pores where the carbon dioxide becomes trapped and locked in place, preventing it from being released into the atmosphere. Plate 1 shows what is involved in the process.







#### Plate 1: Schematic illustration of carbon capture, usage and storage

- 1.3.2 The technologies used in CCUS are proven and have been used safely across the world for many years. Geological storage sites are located far underground and are subject to stringent tests to ensure that they are geologically suitable. It is expected that the storage sites will be located offshore, in areas such as the North Sea. The NEP has been formed to develop the offshore infrastructure to transport and store carbon dioxide emissions in the North Sea.
- 1.3.3 CCUS is crucial to reducing carbon dioxide emissions and combatting global warming. The UK Government has committed to achieving Net Zero in terms of greenhouse gas emissions by 2050. This is a legally binding target. UK Government policy further states that the 'deployment of power CCUS projects will play a key role in the decarbonisation of the electricity system at low cost' (HM Government, 2020a, page 47).
- 1.3.4 The Proposed Development will provide up to 910MWe (gross) of dispatchable capacity and capture some 2 million tonnes of carbon dioxide per annum, dependent upon the turbine equipment chosen and the running hours of the plant. The Proposed Development could be up and running by the mid-2020s and will facilitate the timely development of a major CCUS cluster in the Humber region, making an important contribution towards the achievement of Net Zero by 2050.

#### **1.4 The Proposed Development**

1.4.1 <u>The Proposed Development will work by capturing carbon dioxide emissions</u> from the gas-fired power station and connecting into the Humber Low Carbon Pipelines project pipeline network, being promoted by National Grid Carbon Limited (NGCL), for onward transportation to the Endurance storage site under the North Sea The Proposed Development will work by capturing carbon dioxide emissions from the gas-fired power station and connecting into the ZCH





Partnership export pipeline and gathering network for onward transport to the Endurance saline aquifer under the North Sea.

- 1.4.2 The Proposed Development would comprise a low carbon gas-fired power station with a gross electrical output capacity of up to 910MWe and associated buildings, structures and plant and other associated development defined in the Schedule 1 of the draft DCO (Application Document Ref. No. 2.1) as Work No. 1 11 and shown on the Works Plans (Application Document Ref. No. 4.3).
- 1.4.3 At this stage, the final technology selection cannot yet be made as it will be determined by various technical and economic considerations and will be influenced by future UK Government policy and regulation. The design of the Proposed Development therefore incorporates a necessary degree of flexibility to allow for the future selection of the preferred technology in the light of prevailing policy, regulatory and market conditions once a DCO is made.
- 1.4.4 The Proposed Development will include:
  - a carbon capture equipped electricity generating station including a CCGT plant (Work No. 1A) with integrated cooling infrastructure (Work No. 1B), and carbon dioxide capture plant (CCP) including conditioning and compression equipment, carbon dioxide absorption unit(s) and stack(s) (Work No. 1C), natural gas receiving facility (Work No. 1D), supporting uses including control room, workshops, stores, raw and demineralised water tanks and permanent laydown area (Work No. 1E), and associated utilities, various pipework, water treatment plant, wastewater treatment, firefighting equipment, emergency diesel generator, gatehouse, chemical storage facilities, other minor infrastructure and auxiliaries/ services (all located in the area referred to as the 'Proposed Power and Carbon Capture (PCC) Site' and which together form Work No. 1);
  - natural gas pipeline from the existing National Grid Gas high pressure (HP) gas pipeline within the Proposed Development Site to supply the Proposed PCC Site including an above ground installation (AGI) for National Grid Gas's apparatus (Work No. 2A) and the Applicant's apparatus (Work No. 2B) (the 'Gas Connection Corridor');
  - electrical connection works to and from the existing National Grid 400kV Substation for the export of electricity (Work No. 3A) (the 'Electrical Connection Area to National Grid 400kV Substation');
  - electrical connection works to and from the existing Northern Powergrid 132kV Substation for the supply of electricity at up to 132kV to the Proposed PCC Site, and associated plant and equipment (Work No. 3B) (the 'Potential Electrical Connection to Northern Powergrid 132kV Substation');
  - Water Connection Corridors to provide cooling and make-up water including:





- underground and/ or overground water supply pipeline(s) and intake structures within the Stainforth and Keadby Canal, including temporary cofferdam (Work No. 4A) (the 'Canal Water Abstraction Option');
- in the event that the canal abstraction option is not available, works to the existing Keadby 1 power station cooling water supply pipelines and intake structures within the River Trent, including temporary cofferdam (Work No. 4B) (the 'River Water Abstraction Option');
- works to and use of an existing outfall and associated pipework for the discharge of return cooling water and treated wastewater to the River Trent (Work No. 5) (the 'Water Discharge Corridor');
- towns water connection pipeline from existing water supply within the Keadby Power Station to provide potable water (Work No. 6);
- above ground carbon dioxide compression and export infrastructure comprising an above ground installation (AGI) for the undertaker's apparatus including deoxygenation, dehydration, staged compression facilities, outlet metering, and electrical connection (Work No. 7A) and an above ground installation (AGI) for National Grid Carbon's apparatus (Work No. 7B);
- new permanent access from A18, comprising the maintenance and improvement of an existing private access road from the junction with the A18 including the western private bridge crossing of the Hatfield Waste Drain (Work No. 8A) and installation of a layby and gatehouse (Work No. 8B), and an emergency vehicle and pedestrian access road comprising the maintenance and improvement of an existing private track running between the Proposed PCC Site and Chapel Lane, Keadby and including new private bridge (Work No. 8C);
- temporary construction and laydown areas including contractor facilities and parking (Work No. 9A), and access to these using the existing private roads from the A18 and the existing private bridge crossings, including the replacement of the western existing private bridge crossing known as 'Mabey Bridge') over Hatfield Waste Drain (Work No. 9B) and a temporary construction laydown area associated with that bridge replacement (Work No. 9C);
- temporary retention, improvement and subsequent removal of an existing Additional Abnormal Indivisible Load Haulage Route (Work No. 10A) and temporary use, maintenance, and placement of mobile crane(s) at the existing Railway Wharf jetty for a Waterborne Transport Offloading Area (Work No. 10B);
- landscaping and biodiversity enhancement measures (Work No. 11A) and security fencing and boundary treatments (Work No. 11B); and





- associated development including: surface water drainage systems; pipeline and cable connections between parts of the Proposed Development Site; hard standings and hard landscaping; soft landscaping, including bunds and embankments; external lighting, including lighting columns; gatehouses and weighbridges; closed circuit television cameras and columns and other security measures; site preparation works including clearance, demolition, earthworks, works to protect buildings and land, and utility connections; accesses, roads, roadways and vehicle and cycle parking; pedestrian and cycle routes; and temporary works associated with the maintenance of the authorised development.
- 1.4.5 The Applicant will be responsible for the construction, operation (including maintenance) and eventual decommissioning of the Proposed Development, with the exception of the National Grid Gas compound works (Work No. 2A), the works within the National Grid Electricity Transmission 400kV substation (part of Work No. 3A), the works within the Northern Powergrid 132kV substation (part of Work No. 3B), and the National Grid Carbon compound works (Work No. 7B), which will be the responsibility of those named beneficiaries.
- 1.4.6 The Proposed Development includes the equipment required for the capture and compression of carbon dioxide emissions from the generating station so that it is capable of being transported off-site. NGCL will be responsible for the development of the carbon dioxide pipeline network linking onshore power and industrial facilities, including the Proposed Development, in the Humber Region. The carbon dioxide export pipeline does not, therefore, form part of the Proposed Development and is not included in the Application but will be the subject of separate consent application(s) to be taken forward by NGCLThe Proposed Development includes the equipment required for the capture and compression of carbon dioxide emissions from the generating station so that it is capable of being transported off-site. ZCH Partnership will be responsible for the construction, operation and decommissioning of the carbon dioxide gathering network linking onshore power and industrial facilities including the Proposed Development in the Humber Region. The carbon dioxide export pipeline does not, therefore, form part of the Proposed Development and is not included in the Application but will be the subject of separate consent applications by third parties, such as the Humber Low Carbon Pipeline DCO Project by National Grid Carbon.
- 1.4.7 The Proposed Development is designed to be capable of operating 24 hours per day, 7 days a week, with plant operation dispatchable to meet electricity demand and with programmed offline periods for maintenance. It is anticipated that in the event of CCP maintenance outages, for example, it could be necessary to operate the Proposed Development without carbon capture, with exhaust gases from the CCGT being routed via the Heat Recovery Steam Generator (HRSG) stackThe Proposed Development will operate 24 hours per day, 7 days per week with programmed offline periods for maintenance. It is anticipated that in the event of CCP maintenance outages, for example, it will





may be necessary to operate the Proposed Development without carbon capture, with exhaust gases from the CCGT being routed via the Heat Recovery Steam Generator (HRSG) stack.

1.4.8 Various types of associated and ancillary development further required in connection with and subsidiary to the above works are detailed in Schedule 1 'Authorised Development' of the draft DCO (Application Document Ref. 2.1). This along with Chapter 4: The Proposed Development in the ES Volume I (Application Document Ref. 6.2) provides further description of the Proposed Development. The areas within which each numbered Work (component) of the Proposed Development are to be built are defined by the coloured and hatched areas on the Works Plans (Application Document Ref. 4.3).

#### **1.5 The Proposed Development Site**

- 1.5.1 The Proposed Development Site (the 'Order Limits') is located within and near to the existing Keadby Power Station site near Scunthorpe, Lincolnshire and lies within the administrative boundary of North Lincolnshire Council (NLC). The majority of land is within the ownership or control of the Applicant (or SSE associated companies) and is centred on national grid reference 482351, 411796.
- 1.5.2 The existing Keadby Power Station site currently encompasses the operational Keadby 1 and (under construction) Keadby 2 Power Station sites, including the Keadby 2 Power Station Carbon Capture and Readiness reserve space.
- 1.5.3 The Proposed Development Site encompasses an area of approximately 69.4 hectares (ha). This includes an area of approximately 18.7ha to the west of Keadby 2 Power Station in which the generating station (CCGT plant, cooling infrastructure and CCP) and gas connection will be developed (the Proposed PCC Site).
- 1.5.4 The Proposed Development Site includes other areas including:
  - Previously developed land, along with gas, towns water and other connections, and access routes, within the Keadby Power Station site;
  - the National Grid 400kV Substation located directly adjacent to the Proposed PCC Site, through which electricity generated by the Proposed Development will be exported;
  - Emergency Vehicle Access Road and Potential Electrical Connection to Northern Powergrid Substation, the routes of which utilise an existing farm access track towards Chapel Lane and land within the existing Northern Powergrid substation on Chapel Lane;
  - Water Connection Corridors:
    - Canal Water Abstraction Option which includes land within the existing Keadby Power Station site with an intake adjacent to the





Keadby 2 Power Station intake and pumping station and interconnecting pipework;

- River Water Abstraction Option which includes a corridor that spans Trent Road and encompasses the existing Keadby Power Station pumping station, below ground cooling water pipework, and infrastructure within the River Trent; and
- a Water Discharge Corridor which includes an existing discharge pipeline and outfall to the River Trent and follows a route of an existing easement for Keadby 1 Power Station;
- an existing river wharf at Railway Wharf (the Waterborne Transport Offloading Area) and existing temporary haul road into the into the existing Keadby 1 Power Station Site (the 'Additional Abnormal Indivisible Load (AIL) Route');
- a number of temporary Construction Laydown Areas on previously developed land and adjoining agricultural land; and
- land at the A18 Junction and an existing site access road, including two
  existing private bridge crossing of the Hatfield Waste Drain lying west of
  Pilfrey Farm (the western of which is known as Mabey Bridge, to be
  replaced, and the eastern of which is termed Skew Bridge) and an existing
  temporary gatehouse, to be replaced in permanent form.
- 1.5.5 In the vicinity of the Proposed Development Site the River Trent is tidal, therefore parts of the Proposed Development Site are within the UK marine area. No harbour works are proposed.
- 1.5.6 Further description of the Proposed Development Site and its surroundings is provided in Chapter 3: The Site and Surrounding Area in ES Volume I (**Application Document Ref. 6.2**).

#### **1.6 The Development Consent Process**

- 1.6.1 As a NSIP project, the Applicant is required to obtain a DCO to construct, operate and maintain the generating station, under Section 31 of the 2008 Act. Sections 42 to 48 of the 2008 Act govern the consultation that the promoter must carry out before submitting an application for a DCO and Section 37 of the 2008 Act governs the form, content and accompanying documents that are required as part of a DCO application. These requirements are implemented through the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended) ('APFP Regulations') which state that an application must be accompanied by an ES, where a development is considered to be 'EIA development' under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations).
- 1.6.2 An application for development consent for the Proposed Development has been submitted to the Planning Inspectorate (PINS) acting on behalf of the





Secretary of State. Subject to the Application being accepted (which will be decided within a period of 28 days following receipt of the Application), PINS will then examine it and make a recommendation to the Secretary of State, who will then decide whether to make (grant) the DCO.

#### **1.7 The Purpose and Structure of this Document**

- 1.7.1 The primary purpose of this Planning Statement is to assist the Examining Authority ('ExA') and the SoS in their assessment of the Proposed Development by demonstrating how the Applicants have taken account of relevant planning policy, notably the National Policy Statements ('NPSs') for energy infrastructure, and the extent to which the Proposed Development complies with the policies within those NPSs, as well as any other matters that are "important and relevant" to the SoS's determination of the Application. Such matters include UK Government energy and climate change policy, the National Planning Policy Framework and local planning documents.
- 1.7.2 The Planning Statement sets out the key benefits and likely significant adverse environmental effects of the Proposed Development. Where relevant the Planning Statement cross references or 'signposts' the relevant application documents that provide more detail.
- 1.7.3 The structure of the remainder of this Planning Statement is set out in Table 1.1 below.

Section	Title	Overview		
Section 2	Planning History and Local Planning Designations	Provides an overview of the planning history and the local planning designations that apply to the Site.		
Section 3	The Planning Act 2008 and National Policy Statements	Sets out the legislative and policy framework for the consideration of and determination of DCO applications, notably the NPSs for energy infrastructure, the MPSs, and the other matters that are "important and relevant" to the SoS's decision-making.		
Section 4	UK Energy and Climate Change Policy	Provides an overview of UK energy and climate change policy that is of relevance to the Proposed Development within the context of this being one of the matters that is important and relevant to the SoS's decision- making and how the Proposed Development contributes toward important energy and climate change policy objectives.		
Section 5	The National Planning Policy	Sets out the National Planning Policy Framework ('NPPF') and statutory		

#### **Table 1.1: Planning Statement Structure**





	Framework and Local Plan	development plan policies of relevance to the Proposed Development.	
Section 6 The Assessment of the Proposed Development Against Policy		Provides an assessment of the Proposed Development against relevant policy.	
Section 7 The Benefits and Impacts of the Proposed Development		Identifies the key benefits of the Proposed Development as well as any likely significant adverse effects/impacts and weighs these against each other.	
Section 8 Conclusions		Sets out the conclusions of the Planning Statement in terms of the overall acceptability of the Proposed Development.	

#### **<u>1.8 Purpose of this Version</u>**

- <u>1.8.1</u> This version (VP2.0) of the Planning Statement alsoalso is updated to includes an assessment of the Proposed Development againstconsider:
  - o -the draft policy in the consultation version of NPS EN-1 to EN-5, pursuant to Examiner's First Written Question 1.15.1.- These do not constitute the relevant 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);-
  - o Net Zero Strategy: Build Back Greener (October 2021), pursuant to our response to Examiner's First Written Question 1.15.2; and
  - <u>o</u> The revised National Planning Policy Framework, pursuant to our response to Examiner's First Written Question 1.15.3.





## 2.0 PLANNING HISTORY AND LOCAL PLANNING DESIGNATIONS

#### 2.1 Introduction

2.1.1 This section provides an overview of the planning history and the planning designations (and related policies) that are of relevance to the Proposed Development Site (the 'Site').

#### 2.2 Planning History

#### Wider Keadby Power Station

- 2.2.1 Keadby 1 Power Station was built on the site of a former coal fired power station which was operational between 1952 and 1984. The Keadby 1 Power Station was commissioned in 1996 and comprises two F Class gas turbines (230MWe each) fitted with dry low NOx burners. Each gas turbine exhausts through a heat recovery boiler with the combined steam output passing to the condensing steam turbine (nominal capacity of 260MW). The windshields for the 2 combined cycle gas turbine (CCGT) stacks are 60m high and the 2 gas turbine stacks are 47m high.
- 2.2.2 Keadby 1 Power Station was built on the site of a former coal fired power station which was operational between 1952 and 1984. The Keadby 1 Power Station was commissioned in 1996 and comprises two F Class gas turbines (230MWe each) fitted with dry low NOx burners. Each gas turbine exhausts through a heat recovery boiler with the combined steam output passing to the condensing steam turbine (nominal capacity of 260MW). The windshields for the 2 combined cycle gas turbine (CCGT) stacks are 60m high and the 2 gas turbine stacks are 47m high.
- 2.2.3 Keadby 1 Power Station is fueled by natural gas which is supplied via an underground pipeline from an Above Ground Installation (AGI). Within the AGI is the local gas treatment plant that consists of a storage vessel, injection unit, instrumentation and associated pipework, mercaptan (odorant) storage and injection, pressure/ temperature regulation, pig trap facilities (inspection of the spur), filtration, metering, boiler house, heat exchangers, gas chromatograph, flow computers and associated telemetry.
- 2.2.4 The River Trent provides water for evaporative cooling and boiler make-up for Keadby 1 Power Station. The River Trent is used for discharge of treated cooling water from Keadby 1 Power Station.
- 2.2.5 All electrical output from Keadby 1 Power Station is exported to the National Grid Electricity Transmission System via the 400kV substation.
- 2.2.6 The existence of electricity grid, gas supply, and cooling water supply infrastructure minimises the need for new connections and third party land for the Proposed Development. For example, the Proposed Development will use the existing Keadby 1 cooling water discharge pipeline and, as identified in the





Schedule of Other Consents and Licences (**Application Document Ref. 5.4**), the Proposed Development would use the gas fuel supply currently used by Keadby 1, and - if the less preferred river option were used for the water abstraction - a variation of (i.e. taking over) the Keadby 1 Power Station abstraction licence would be sought.

- 2.2.7 Adjacent to the west of Keadby 1 Power Station is Keadby 2 Power Station; a 910MW CCGT power station currently under construction, following the grant of a variation to an existing **Section 36** consent in 2016. Construction by the appointed Engineering, Procurement and Construction (EPC) contractor commenced in April 2019 and is ongoing; expected completion is by quarter 1 (Q1), 2022. It will be owned and operated by the Applicant.
- 2.2.8 Keadby 2 Power Station comprises the following components:
  - an H Class gas turbine generator;
  - waste heat recovery boiler;
  - a condensing steam turbine generator;
  - hybrid cooling towers;
  - control room and instrumentation system;
  - water treatment plant; and
  - cooling water abstraction and discharge pipe work
- 2.2.9 Once operational, combustion gases from Keadby 2 Power Station will be released through a single stack (75m in height). The key elements of the power station are distributed between two areas: a main power island in the eastern part of the Keadby 2 Power Station site which incorporates the power generating equipment including the turbines, boilers and associated buildings; and a western part of the Keadby 2 Power Station site, which contains the hybrid cooling towers and an area of land set aside for carbon capture readiness purposes.
- 2.2.10 Keadby 2 Power Station will be fueled by natural gas supplied from the existing National Gas Transmission System, via a new AGI. A new pipeline within the boundary of the Keadby 2 Power Station site has been built to connect into the existing AGI used by Keadby 1 Power Station.
- 2.2.11 Cooling water for Keadby 2 Power Station will be sourced from the Stainforth and Keadby Canal. An abstraction point has been constructed to the south of the Keadby 2 Power Station. The Proposed Development will not affect the operation of Keadby 2 Power Station, and the colocation of the two power stations affords material efficiencies, such as potentially reducing staffing (trip generation) compared to a development not situated at an existing power station.





#### Site History

- 2.2.12 Available historic Ordnance Survey (OS) maps have been studied to determine the previous land uses within and surrounding the Proposed Development Site, as detailed in Appendix 13A: Phase 1 Desk Based Assessment (ES Volume II Application Document Ref. 6.3). The mapping shows no notable development within the Keadby Power Station site until 1967 1969 editions when a power station is shown as having been developed in the central/ eastern area of the Proposed Development Site, with electricity transmission cables and pylons originating from the power station, that span across the centre of the Proposed Development Site. This was a former coal fired power station which was operational between 1952 and 1984, and which was demolished by the early 1990's.
- 2.2.13 On the 1967 1969 editions, railway lines are shown to occupy the southwestern area of the Proposed Development Site north of the Stainforth and Keadby Canal, leading towards and terminating at the power station. Adjacent to the railway lines is a conveyor system, which is likely to have been used for the transport of materials and fuels, such as coal, from trains to the power station.
- 2.2.14 An area of marshland is shown as present on the 1967 1969 editions in the south-west of the Proposed Development Site north of the Stainforth and Keadby Canal, along with a small refuse heap, with tracks leading to and from this. Three tanks of unknown contents are also shown south and east of the power station and are inferred to be associated with the former power station. Keadby Common Farm is shown as present at the centre of the Proposed Development Site. Drains are mapped within the Proposed Development Site boundary. To the east of the Proposed Development Site, an increase in properties on the 1967 1969 editions is noted. A pond and a tank are also shown as present on the eastern-most spur of the Proposed Development Site. Multiple tanks occupy the land south of the power station on the 1978 1982 mapping.
- 2.2.15 No notable changes occur at the Proposed Development Site until 1991 1994 editions when the power station is mapped as disused. Within the Proposed Development Site to the east, jetties are shown as now present on the River Trent, with a pumping station located inland where the pond and tanks are located. Keadby Common Farm is now absent from mapping.
- 2.2.16 Mapping from 1995 shows that the power station previously present (and disused) is now an electricity generation station and a change in site layout is noted. The railway and conveyor system that was previously present terminating at the power station is now absent from the mapping. A set of small tanks and a single tank is located to the west; five tanks run parallel to the south, and an additional set of tanks are located east of the electricity generation station. Further west from the electricity generation station, towards the centre of the Proposed Development Site, are three large tanks. The refuse heap and





area of marsh land to the south-west of the Proposed Development Site are now absent from mapping. A large electricity substation is now present within the north of the Proposed Development Site with electricity transmission cables and pylons connected to the electricity generation station and associated overhead cables leading off-site to the north, south and west. A building and mast are present to the north of the electric generation station. No notable changes are shown on Google Earth imagery from 2003, 2008 and 2015.

- 2.2.17 Extensive historical landfilling has been identified on-site (across the Proposed PCC Site) and off-site in close proximity (to the west) (refer to Section 5.3 of Appendix 13A: Phase 1 Desk Based Assessment (ES Volume II Application Document Ref. 6.3). This is illustrated on Figure 3.4 (ES Volume III Application Document Ref. 6.4). On this basis the Proposed PCC Site is considered to represent brownfield land.
- 2.2.18 Appendix 13A: Phase 1 Desk Based Assessment (ES Volume II Application Document Ref. 6.3) also describes the historical land-use associated with the construction laydown areas south of the railway line (agricultural fields) according to maps from the National Library of Scotland dated 1885, 1905 1906 and 1948. These indicate that the access road from the A18 and the proposed construction laydown areas in adjacent agricultural fields were agricultural fields during this time period. Historical maps viewed on Google Earth Pro indicate that this area has been agricultural land and contained a track since 2002. On these maps, North Pilfrey Farm and Pilfrey Farm have been present since 1885. Although there is a data gap between 1948 and 2002, given the surrounding land uses, it is considered likely that the land use remained agricultural during this period.
- 2.2.19 The Site and surrounding area has an extensive planning history given the scale of industrial development that has taken place over the years. While much of this is of limited relevance to the Proposed Development, there are a number of major development proposals that warrant consideration, either because they relate to land within the Site or adjacent to it. Those of particular relevance are detailed in **Table 2.1** below in reverse date order:

No.	Reference No.	Description	Location	Status
<u>1.</u>	Planning Portal Reference: PP- 11004872	Full planning permission for the placement of a prefabricated, modular visitor centre building within an existing sub-contractor's car park area to the east of	Land off Trent Road, Adjacent east of Keadby Power Station, Keadby, North Lincolnshire, DN17 3EF	Submitted 8 February 2022, not yet validated.

#### Table 2.1: Relevant Planning History





No.	Reference No.	Description	Location	Status
		<u>Keadby</u> Power <u>Station.</u>		
1. <u>2.</u>	PA/2020/952	Planning permission for the creation of a biodiversity enhancement area (comprising the use of 70,000 cubic metres of excavated soil)	of Keadby Power Station, Keadby, DN17 3EF (in Keadby,	Recommended for approval by planning officers but refused – 26 March 2021 It is understood that a new application will not be made as a different means of beneficial reuse of the soil off site has been identified.
<del>2.</del> <u>3.</u>	PA/2021/188	Planning permission to amend conditions 7 and 8 of PA/2019/1595 to extend the time period for the restoration of the site and decommissioning of the haul road	land east of Keadby Power Station, Keadby	Approved – 19 March 2021
<del>3.<u>4</u>.</del>	PA/2019/1940	Proposed substation alterations under The Town & Country Planning (General Permitted Development) (England) Order 2015, Schedule 2, Part 15, Class B	Sub Station, Chapel Lane, Keadby	No objection – 4 December 2019
4. <u>5.</u>	PA/2019/1595	Planning permission to erect a temporary haul road to	land east of Keadby Power Station, Keadby	Approved – 15 November 2019





No.	Reference No.	Description	Location	Status
<del>5.<u>6.</u></del>	PA/2019/1554	accommodateAbnormal VehicleLoads and theconstruction oftwo ditchcrossingsPlanningpermission toconstruct afoundation to	Keadby Railway Wharf, Trent Side, Keadby	Approved – 11 November 2019
		support a temporary mobile crane including associated works	olde, Readby	
<del>6.</del> <u>7.</u>	PA/SCR/2019/6	EIA Screening request for the proposed temporary construction of a haul road	Keadby Power Station Site, Keadby	2019
<del>7.<u>8.</u></del>	PA/2019/519	Planning permission to install an underground high voltage (400kV) electric cable and associated works	Land at and adjacent to Keadby Power Station, Trent Side, Keadby, DN17 3EF	Approved – 31 May 2019
<del>8.<u>9.</u></del>	Section 36 – Keadby II	Construction and operation of a second CCGT with an output of 710 MW	Keadby Power Station	Consent varied – 01 March 2019 (Original consent given – 10 September 1993)
<del>9.<u>10</u></del>	PA/2018/1950	Planning permission to retain existing construction laydown and parking area for the period of four years in connection with	Adjacent Land, South of Pilfrey Bridge, Crowle	Approved – 23 November 2018





No.	Reference No.	Description	Location	Status
		the Keadby 2 Power Station Project		
<del>10.</del> 1	PA/2018/1436	Application for a non-material amendment following a grant of planning permission PA/2017/1977 dated 11/5/2018	Works in the parishes of Keadby with Althorpe, Burringham, Flixborough, Amcotts, Gunness, West Butterwick and East Butterwick	Approved – 27 July 2018
<u>41.1</u> ;	PA/2017/1557	Planning permission to change the use of a residential dwelling (Use Class C3) to offices (Use Class B1) and install nine roller- shutters to existing windows	Red House, Chapel Lane, Keadby, DN17 3EW	Approved – 24 July 2018
<u> 12.1</u> ;	PA/2017/1977	Planning permission for the construction of a Flood Defence Scheme comprising of sheet piling along the right bank of the River Trent; the placing of scour protection along the right bank of the River Trent; localised property protection within a managed overflow area at land to the north of	parishes of Keadby with Althorpe, Burringham, Flixborough, Amcotts, Gunness, West Butterwick and East	Approved – 11 May 2018





No.	Reference No.	Description	Location	Status
		the M180 Bridge; the raising of existing earth embankments and flood walls; and associated construction works.		
	PA/2016/1878	Consent under Section 37 of the Electricity Act 1989 to install a new 400kV overhead electricity line	Station, Trent Side, Keadby, DN17 3EF	2016
44. <u>1</u>	PA/2016/1678	Consent under Section 37 of the Electricity Act 1989 to install replacement 400kv overhead electric line	Keadby 1 Replacement Overhead Line, Keadby Power Station, Trent Side, Keadby, DN17 3EF	No objection – 05 January 2017
45. <u>1</u>	PA/2011/0385	Planning permission for the installation of a photovoltaic field array including perimeter fencing and a plant room		Appeal allowed – 1 June 2012
<u> 16.1</u>	WF/2011/1310	Planning permission for a minor material amendment to WF/2003/1630 dated 31/03/2005 increasing the diameter of the consented turbine rotor dimension up to 101m (maximum tip height to remain at 125m)	Keadby Power Station, Trent Side, Keadby, DN17 3EF	Approved – 7 March 2012





No.	Reference No.	Description	Location	Status
	PA/2011/0583	Planning permission to construct new sections of internal permanent access tracks and track widening	Keadby Windfarm Site, Keadby, DN17 3BP	Approved – 27 July 2011
<u> 18.1</u>	PA/2010/0961	Planning permission to construct a permanent bridge structure across the Stainforth and Keadby Canal and railway utilising existing track and abutment structures at the site	Land West Of, Keadby, Either Side Of The Stainforth And Keadby Canal, Keadby,	Approved – 17 November 2010
<u> 19.2</u>	PA/2008/0214	Planning permission to erect a storage building	Keadby Power Station, Trent Side, Keadby, DN17 3EF	Approved – 04 April 2008
	PA/2006/1168	Planning permission to construct an additional distillate tank located next to the existing tanks and construct one demineralised water storage tank	Energy Plc, Keadby Power Station, Trent Side, Keadby, DN17 3EF	Approved – 14 September 2006
21.2	WF/2003/1630	Electricity Act 1989 (Sections 36, 62(3) and schedule (8) Town & Country Planning Act 1990 ( <b>Section 90</b> ). Application by Renewable EnergySystem Limited for	Station, Trent	Approved – 31 March 2005





No.	Reference No.	Description	Location	Status
		consenttoconstructandoperate a 85 MWwindturbinegenerating stationat Keadby in NorthLincolnshire		
22.2	PA/2001/1105	Planning permission to construct a contractors' laydown area and toilet block		Approved – 22 October 2001
<del>23.2</del> 4	PA/1998/0737	Planning permission for construction of access road for proposed Keadby II Power Station.	Station, Trent	Approved – 31 July 1998
24.2	PA/1997/1407	Construct a 50m we auxiliary gas turbine and associated facilities relocation of car park and upgrading of existing gas turbines.		
<u>25.2</u>	2/1992/0773	Temporary siting of portable buildings and storage units.	Station, Chapel Lane, Keadby	Approved – 4 November 1992
<del>26.<u>2</u></del>	2/1991/1075	Extension of existing sub station	Keadby 400Kv Substation, Chapel Lane, Keadby	Approved – 31 January 1992
	2/1991/0681	Erection of a detached bungalow.	76 Chapel Lane, Keadby	Approved – 21 October 1991
<u>28.2</u>	Section 36 Consent – Keadby I	Construction and operation of a generating station of about 720MW (later reduced to	Keadby Power Station	Consent given – 4 March 1991 (Revised consent given





No.	Reference No.	Description	Location	Status
		680MW and re- consented)		– 8 August 1991)
	2/1989/1223	Erection of an extension to switching station operational area	Keadby 400Kv Substation, Chapel Lane, Keadby	Approved – 21 December 1989
<del>30.</del> 3	2/1989/0942	Siting of a pre- fabricated mobile home	76 Chapel Lane, Keadby	Refused – 20 October 1989
<u>31.3</u>	2/1989/0413	Construction of a vehicular access	Keadby Power Station, Chapel Lane, Keadby	Approved – 22 June 1989
<del>32.</del> 3;	2/1989/0546	Erection of a 32 metre high radio mast	Keadby Power Station, Keadby	Approved – 12 June 1989
<u>33.3</u> ,	2/1988/0179	Siting of a prefabricated mobile home	76 Chapel Lane, Keadby	Refused – 19 September 1988
<u>34.3</u>	2/1988/0511	Demolition of existing dwelling, erection of a 2 bedroomed bungalow and installation of a septic tank	Red House, Chapel Lane, Keadby	Approved – 19 July 1988
<u>35.3</u>	2/1986/0049	Demolition of existing house and erection of a bungalow.	76 Chapel Lane, Keadby	Approved – 08 May 1986
<del>36.<u>3</u></del>	2/1985/0186	Erection of warehousing and silos together with associated buildings and works.	Land to the south of Mariners Arms Flats, Station Road, Keadby	OLGRANT – 22 November 1985
<del>37.</del> 3	2/1984/0345	Erection of an 11000 volt overhead line.	Keadby Power Station, Keadby	Approved – 06 August 1984
<u>38.3</u>	2/1981/0697	Erect light industrial buildings.	Mariners Arms, Trentside, Keadby	OLGRANT – 1 December 1981





No.	Reference No.	Description	Location	Status
<u>39.4</u>	2/1980/0285	Erection of private dwelling houses.	Mariners Arms, Trentside, Keadby	O/L -REG 4 – 11 September 1980
40. <u>4</u>	2/1976/0024	Use land for storage purposes.	Fronting, Trent Side, Keadby with Althorpe	Approved – 07 May 1976
41. <u>4</u> )	2/1974/0371	A layout of dwellings.	The Mariners Arms, Trentside, Keadby	OLGRANT – 18 October 1974
4 <u>2.4</u>	2/1974/0201	Erect a bungalow	Land at rear of Glandburn, North End, Keadby, DN17 3EY	Refused – 18 July 1974
43. <u>4</u>	N/A	Use of 104 acres (42 hectares) for the tipping of up to approximately 50,000m3 pulverised ash, in association with a 360 MW coal fired generating station.	Keadby Common	Approved – January 1958

2.2.20 Recent unbuilt developments from the above table have been taken into account with the assessment of cumulative effects set out in ES Volume I Chapter 19: Cumulative and Combined Effects (Application Document Ref 6.2.19) where appropriate.

#### 2.3 Local Planning Designations

- 2.3.1 The Site is located within the administrative boundary of North Lincolnshire Council ('NLC') which represents the 'host local authority' for the Proposed Development for the purposes of **Section 42** of the 2008 Act. The development plan documents produced by NLC therefore represent the statutory development plan for the Proposed Development.
- 2.3.2 The local development plan for the Proposed Development therefore comprises the following development plan documents ('DPDs'):
  - North Lincolnshire Local Development Framework Core Strategy (the 'Core Strategy') (NLC, 2011) - adopted June 2011;





- North Lincolnshire Local Development Framework Housing and Employment Land Allocations DPD (the 'Allocations DPD') (NLC, 2016) adopted March 2016; and
- Saved Policies of the North Lincolnshire Local Plan (the Local Plan) (Local Development Frameworks Government Office for Yorkshire and The Humber, 2007) - adopted May 2003, saved September 2007.
- 2.3.3 An overview of the above DPDs, in so far as they contain planning allocations/ designations (and related policies) of relevance to the Proposed Development is provided below. The relevant policies are set out at **Section 5** of this Planning Statement while the Proposed Development is assessed against said policies at **Section 6**.

#### Core Strategy

2.3.4 The North Lincolnshire Local Development Framework Core Strategy does not contain any allocations or designations relevant to the Proposed Development or its Site, however, it does denote Keadby Wharf as one of the area's "Ports and Wharves" and policies CS1, CS11, CS12 and CS6 are of relevance.

#### Allocations DPD

2.3.5 Keadby Wharf is allocated as a "Wharf Location" and Keadby Lock as an "Ancient Monument" in the North Lincolnshire Local Development Framework Housing and Employment Land Allocations DPD, meaning policies IN10 and HE8 are of relevance, respectively. The Proposed Development Site is located largely outside of settlement boundaries although parts of connection routes lie within the settlement limit of Keadby.

#### Local Plan

2.3.6 The Inset and Proposals Maps related to the North Lincolnshire Local Plan were superseded by the Housing and Employment Land Allocations DPD explained above.

#### 2.4 Summary

- 2.4.1 The review of planning history indicates that the Proposed PCC Site is brownfield in character and that the Proposed Development Site is suitable.
- 2.4.2 The review of local planning policy indicates that the Proposed Development Site is overall suitable for the proposed use, since this type of infrastructure is not suited to locations within the development limits of the towns, and the criteria for development in the open countryside that are set out in the policies are met.





# 3.0 THE PLANNING ACT 2008, NATIONAL POLICY STATEMENTS AND MARINE POLICY STATEMENTS

#### 3.1 Introduction

3.1.1 This section of the Planning Statement sets out the legislative and policy framework for the consideration of and determination of applications for Nationally Significant Infrastructure Projects ('NSIPs') such as the Proposed Development, notably the National Policy Statements ('NPSs') for energy infrastructure, while also identifying the other relevant legislative and policy matters that the Secretary of State ('SoS') may have regard to in determining applications for development consent.

#### 3.2 Legislative and Decision-Making Framework

- 3.2.1 Elements of the Proposed Development fall within the definition of a Nationally Significant Infrastructure Project ('NSIP') under Section 14(1)(a) and Sections 15(1) and (2) of the 2008 Act, notably the onshore generating station, which will have a generating capacity greater than 50MW. As such, a Development Consent Order ('DCO') is required to authorise this part of the Proposed Development in accordance with Section 31 of the 2008 Act.
- 3.2.2 Integral to the generating station is the Carbon Capture Plant ('CCP') (Work 1C) which is installed on the Combined Cycle Gas Turbine (CCGT) (Work 1A) and removes carbon dioxide emissions from it. These have a shared cooling system (Work 1B).
- 3.2.3 Section 115 of 2008 Act also states that a DCO can include consent for 'associated development', that is, development that is not part of, but is associated with the NSIP. This may be development that supports the construction or operation of the NSIP, which helps to address the impacts of the NSIP or is of a type normally brought forward with the particular type of NSIP (here the generating station). The proposed gas, water and electricity connections would support the operation of the Proposed Development and are considered to be associated development for the purposes of Section 115 of the 2008 Act.
- 3.2.4 Under the 2008 Act, the policy framework for examining and determining applications for a DCO is provided by NPS. **Section 5** of the 2008 Act allows the Secretary of State ('SoS') to designate NPS setting out national policy in relation to the types of NSIP listed at **Section 14** of the 2008 Act.
- 3.2.5 The NPS are the primary policy used by the SoS to examine and determine applications for NSIP. **Section 104** of the 2008 Act requires the SoS to determine applications for NSIP in accordance with the relevant NPS unless this would:
  - lead to the UK being in breach of its international obligations;





- be in breach of any statutory duty that applies to the SoS;
- be unlawful;
- result in the adverse impacts of the development outweighing the benefits; or
- be contrary to regulations about how decisions are to be taken.
- 3.2.6 The Energy White Paper (EWP) (UK Government, 2020) states that the Government has

"decided that it is appropriate to review the NPS, to ensure that they reflect the policies set out in this white paper and that we continue to have a planning policy framework which can deliver the investment required to build the infrastructure needed for the transition to net zero." (Page 55)

- 3.2.7 The EWP confirms that the Government aims to designate updated NPS by the end of 2021. No draft NPS have yet been published for public consultation.
- 3.2.8 While the review is undertaken, the current suite of NPS remains relevant government policy and has effect for the purposes of the 2008 Act. They therefore continue to provide a proper basis on which PINS can examine, and the SoS can make decisions on, applications for development consent. The EWP further states:

"Nothing in this white paper should be construed as setting a limit on the number of development consent orders which may be granted for any type of generating infrastructure set out in the energy NPS." Page 55

- 3.2.9 The NPS that are considered to be of relevance to the Proposed Development are covered below in **Section 7.2**
- 3.2.10 In making decisions on NSIP, the 2008 Act (Section 104) also states that the SoS must have regard to any local impact report submitted by a relevant local authority, any relevant matters prescribed in relation to the Proposed Development and any other matters that the SoS thinks are both 'important and relevant'. In the case of the Proposed Development, other matters that are important and relevant may include recent and relevant UK Government energy and climate change policy including national infrastructure plans and assessments; the Clean Growth Strategy (Department for Business, Energy & Industrial Strategy, (BEIS) 2017); the UK Carbon Capture Usage and Storage (CCUS) Deployment Pathway (Department for Business, Energy & Industrial Strategy, 2018); the EWP (HM Government, 2020a); and the Ten Point Plan (HM Government, 2020b), amongst others). These documents set out important Government objectives for decarbonising the power and industrial sectors, in addition to the Government's target (enshrined in law) of achieving Net Zero in terms of GHG emissions by 2050. These are discussed further in Section 4 of this Planning Statement.





- 3.2.11 Other matters that the SoS thinks are both important and relevant may include the policies within the NPPF (MHCLG, 2019a), Planning Practice Guidance (PPG) (MHCLG, 2019b) and local development plan documents (DPD).
- 3.2.12 Each technical chapter of the ES refers to the policies from these NPS that are relevant to the assessment of the environmental effects reported within that chapter.
- 3.2.13 The UK Marine Policy Statement ('UK MPS') (Department for Environment, Food & Rural Affairs (Defra), 2011) is the framework for preparing Marine Plans and taking decisions affecting the marine environment. The East Inshore and East Offshore Marine Plans (Defra, 2014) establishes the plan led system for the marine area in which the riverine parts of the Proposed Development Site are located. These are considered further below.

#### 3.3 National Planning Statements (NPS) and Marine Policy Statements (MPS)

- 3.3.1 As identified above the relevant designated NPS are as follows and while under review, remain valid:
  - Overarching NPS for Energy (NPS EN-1) ('EN-1') (DECC, 2011a).
  - NPS for Fossil Fuel Electricity Generating Infrastructure (NPS EN-2) ('EN-2') (DECC, 2011b).
  - NPS for Gas Supply Infrastructure and Gas and Oil Pipelines (NPS EN-4) ('EN-4') (DECC, 2011c); and
  - NPS for Electricity Networks Infrastructure (NPS EN-5) ('EN-5') (DECC, 2011d).
- 3.3.2 The appropriate marine policy documents are the UK MPS (Defra, 2011) are the East Inshore and East Offshore Marine Plan (Defra, 2014).
- 3.3.3 These documents, from a planning policy perspective, have been the focus in terms of scoping the EIA, as reported on in the EIA Scoping Report (Appendix 1A, ES Volume II Application Document Ref. 6.3).

Overarching National Policy Statement for Energy (NPS EN-1)

- 3.3.4 Part 2 of EN-1 sets out '*Government policy on energy and energy infrastructure development*'. It confirms the following:
  - the Government's commitment to meet its (then) legally binding target to cut GHG emissions by at least 80% by 2050 compared to 1990 levels;
  - the need to affect a transition to a low carbon economy so as to reduce GHG emissions; and
  - the importance of maintaining secure and reliable energy supplies as older fossil fuel generating plant closes as a result of the European Union





Emissions Trading System ('EU ETS') and the UK moves toward a low carbon economy.

- 3.3.5 Part 3 of EN-1 sets out the need for nationally significant energy infrastructure. Paragraph 3.1.1 states that the UK 'needs all the types of energy infrastructure covered by this NPS in order to achieve energy security' and that the 'Government does not consider it appropriate for planning policy to set targets for or limits on the different technologies' (Paragraph 3.1.2). The EWP also states that the Government "are not targeting a particular generation mix for 2050, nor would it be advisable to do so" (HM Government, 2020a).
- 3.3.6 Paragraph 3.1.3 of EN-1 stresses that the SoS should assess applications for DCO for the types of infrastructure covered by the energy NPS on the basis that the Government has demonstrated that there is a need for those types of infrastructure and that the scale and urgency of that need is as described for each of them. Paragraph 3.1.4 confirms that the SoS should give substantial weight to the contribution that all projects would make toward satisfying this need when considering applications under the 2008 Act.
- 3.3.7 **Section 3.3** of Part 3 of EN-1 sets out why the Government believes that there is an urgent need for new electricity infrastructure, including:
  - meeting energy security and carbon reduction objectives all types of energy infrastructure covered by the NPS are needed to achieve energy security in the UK at the same time as reducing GHG emissions;
  - the need to replace closing electricity generating capacity at least 22 gigawatts (GW) of existing electricity generating capacity will need to be replaced in the coming years, as a result of ageing power stations and tightening environmental regulation. Additionally, 10GW of nuclear generating capacity is expected to close over the next 20 years (from 2011);
  - the need for more electricity capacity to support the increased supply from renewable sources – decarbonisation of electricity generation is reliant on a dramatic increase in the amount of renewable energy; however, many renewable sources (such as wind, solar and tidal) are intermittent and cannot be adjusted to meet demand. Furthermore, EN-1 recognises that there will still be a role for fossil fuel generation to provide a cost-effective means of 'back up' electricity generation at short notice to support renewable technologies; and
  - future increases in electricity demand the demand for electricity is expected to increase and total electricity consumption could double by 2050.
     Depending upon the choice of how electricity is supplied, total capacity may need to more than double to be sufficiently robust to all weather conditions.
- 3.3.8 Paragraph 3.3.15 states that in order to secure energy supplies that enable us to meet carbon reduction obligations for 2050, there is an urgent need for new (and particularly low carbon) energy NSIPs to be brought forward as soon as possible, and certainly in the next 10 to 15 years (from 2011). The carbon





reduction obligations referred to were the legal targets in the Climate Change Act 2008 (a 80% reduction in carbon emissions relative to 1990 levels, by 2050). Since the legal target now is 100% carbon emission reductions, the urgency and need stated in NPS EN-1 paragraph 3.3.15 has increased.

- 3.3.9 Paragraphs 3.6.4 3.6.7 explains the role CCS can have in meeting emissions targets while maintaining security of supply, as CCS has the potential to reduce carbon emissions by 90%. Paragraph 3.6.4 notes the uncertainty about the future deployment of CCS in the economy, which can be resolved by demonstrating CCS at commercial scale.
- 3.3.10 Paragraph 3.6.5 notes the Government is supportive of commercial scale demonstration projects which are a priority for UK energy projects. The projects are intended to demonstrate the full chain of CCS involving the capture, transport and storage of carbon dioxide in the UK. Paragraph 3.6.5 states the examining authority *"should take account of the importance the Government places on demonstrating CCS, and the potential deployment of this technology beyond the demonstration stage, in considering applications for consent of CCS projects and associated infrastructure".*
- 3.3.11 In order to support the delivery of CCS policy, the Government has placed a condition on the consenting of new fossil fuel generating stations (EN-1, Paragraph 3.6.6); that all commercial scale (at or above 300MWe) combustion generating stations have to be constructed to be Carbon Capture Ready ('CCR').
- 3.3.12 Paragraph 3.6.8 again emphasises the need for new fossil fuel generation to provide back-up to renewable generating capacity and to help with the transition to low carbon electricity generation:

*"It is important that such fossil fuel generating capacity should become low carbon, through development of CCS, in line with carbon reduction targets. Therefore, there is a need for CCR fossil fuel generating stations and the need for the CCS demonstration projects is urgent."* 

- 3.3.13 **Section 3.8** of EN-1 'The need for nationally significant gas infrastructure' is relevant as it highlights (paragraph 3.8.1) that although the UK's reliance on fossil fuels will fall, the transition will take some time, and gas will continue to play an important part in the country's fuel mix for some years to come. The continued need for gas-fired generation to form part of the energy mix, albeit with CCS, in order to ensure security and flexibility of electricity supplies, is recognised in more recent government policy, notably the EWP, (HM Government, 2020a).
- 3.3.14 Part 4 of EN-1 sets out a number of 'assessment principles' that must be taken into account by applicants and the SoS in preparing and determining applications for nationally significant energy infrastructure. General points include (Paragraph 4.1.2) the requirement for the SoS, given the level and urgency of need for the infrastructure covered by the energy NPS, to start with





a presumption in favour of granting consent for applications for energy NSIP. This presumption applies unless any more specific and relevant policies set out in the relevant NPS clearly indicate that consent should be refused or any of the considerations referred to in **Section 104** of the 2008 Act (noted above) apply. In relation to the Proposed Development, there is no conflict with relevant policies in the NPS and none of the considerations set out in **Section 104** of the 2008 Act apply.

- 3.3.15 Paragraph 4.1.3 goes on to state that in considering any project, and in particular, when weighing its adverse impacts against its benefits, the SoS should take into account:
  - its potential benefits, including its contribution to meeting the need for energy infrastructure, job creation and any long-term or wider benefits; and
  - its potential adverse impacts, including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts.
- 3.3.16 Paragraph 4.1.4 continues by stating that within this context, the SoS should take into account environmental, social and economic benefits and adverse impacts, at national, regional and local levels.
- 3.3.17 Other assessment principles include the matters to be covered within any ES; the Conservation of Habitats and Species 2017 Regulations (as amended) (HM Government, 2017); the consideration of alternatives; criteria for 'good design'; consideration of combined heat and power (CHP); consideration of CCS and CCR; climate change adaptation; and grid connection, amongst others.
- 3.3.18 Paragraph 4.7.4 states that the Government has taken a number of steps to facilitate and encourage the demonstration of CCS technology and that the demonstration programme was extended to include gas-fired generating stations.
- 3.3.19 Paragraph 4.7.7 states that the most likely method for transporting captured carbon dioxide is through pipelines that will be located both onshore and offshore. It notes that there are currently no carbon dioxide pipelines in the UK and considerable future investment in pipelines will be required for the purpose of the demonstration programme.
- 3.3.20 Paragraph 4.7.10 states that:

"to ensure that no foreseeable barriers exist to retrofitting carbon capture and storage (CCS) equipment on combustion generating stations, all applications for new combustion plant which are of generating capacity at or over 300MW and of a type covered by the EU's Large Combustion Plant Directive (LCPD) should demonstrate that the plant is 'Carbon Capture Ready' (CCR) before consent may be given."





- 3.3.21 Paragraph 4.7.10 therefore does not envisage the inclusion of carbon capture equipment within new power developments at this stage, however, this Proposed Development does include a CCP. Indeed, the Proposed Development is one of the enabling projects for the wider deployment of CCS on a regional scale, linking to the proposed ZCH Partnership and NEP carbon capture and storage cluster for Humberside and Teesside.
- 3.3.22 Part 5 of EN-1 lists a number of 'generic impacts' that relate to most types of energy infrastructure, which both applicants and the SoS should take into account when preparing and considering applications. These include air quality and emissions; biodiversity; landscape and visual; and flood risk impacts, amongst others. Paragraph 5.1.2 stresses that the list of impacts is not exhaustive, and that applicants should identify the impacts of their projects in the ES in terms of both those covered by the NPS and others that may be relevant. In relation to each of the generic impacts listed within Part 5 of EN-1, guidance is provided on how the applicant should assess these within their application and also the considerations that the SoS should take into account in decision-making.

National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (NPS EN-2)

- 3.3.23 EN-2 confirms the vital role fossil fuel generating stations will play in providing reliable electricity supplies and a secure and diverse mix as the UK makes its transition towards a secure decarbonised electricity system. It also restates from EN-1 (DECC, 2011a) the Government policy that all new generating stations should be required to capture and store the carbon emissions from a substantial proportion of their capacity.
- 3.3.24 EN-2 confirms at Paragraph 2.3.4 that the SoS should not give development consent for new combustion generating stations with a generating capacity at or over 300MW unless it is satisfied that the proposed development meets all the criteria for CCR set out in EN-1. The Proposed Development in this case exceeds the minimum CCR requirements in that design, sizing and assessment of a CCP has been undertaken as part of the development proposals and the plant will not be built without the CCP as the Applicant is fully committed to building a generating station which has a clear route to decarbonisation.
- 3.3.25 **Section 2.4** acknowledges the impacts of fossil fuel generating stations, as set out in the generic impacts identified in Part 5 of EN-1, providing additional detail on air emissions, landscape and visual, noise and vibration, water quality and resources, amongst others.

National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)

3.3.26 EN-4 is relevant to the Proposed Development as natural gas will be used as the fuel for the operation of the electricity generating station and the Proposed





Development includes a relatively small gas supply pipeline. The Gas Connection is 'associated development' as defined by **Section 115** of the PA 2008.

- 3.3.27 EN-4 states at Paragraph 1.1.1 (Part 1) that the efficient import, storage and transmission of natural gas is crucial to meeting the UK energy needs during the transition to a low carbon economy. It notes that we cannot achieve national objectives relating to security of supply without enabling investment in new infrastructure.
- 3.3.28 Part 2 of EN-4 deals with assessment and technology-specific information, including consideration of climate change adaptation and good design and other factors that are relevant to gas pipelines and supply infrastructure. Key technology specific considerations for gas pipelines include proximity to sensitive land uses (e.g. residential development and schools) when planning routes; pipeline safety; noise and vibration; biodiversity; landscape and visual; water quality and resources; and soils and geology.

National Policy Statement for Electricity Networks Infrastructure (EN-5)

- 3.3.29 EN-5 is also relevant to the Proposed Development as it includes a new relatively small electrical connection between the Low Carbon Electricity Generating Station and the National Grid (the Tod Point substation) for the export of electricity. As with the Gas Connection, the Electrical Connection is 'associated development'.
- 3.3.30 Part 2 of EN-5 deals with assessment and technology-specific information relating to electrical grid connection infrastructure. This includes factors influencing site selection, general assessment principles for electricity networks, climate change adaptation and consideration of good design. Part 2 also identifies a number of potential impacts for consideration, including biodiversity and geological conversation, landscape and visual, noise and vibration and electric and magnetic fields.

UK Marine Policy Statement (UK MPS)

3.3.31 The MPS (Defra, 2011) is the framework for preparing Marine Plans and taking decisions affecting the marine environment. It establishes a vision for the marine environment, which is for 'clean, healthy, safe, productive and biologically diverse oceans and seas'. The UK MPS underpins the process of marine planning, which establishes a framework of economic, social, and environmental considerations that will deliver these high level objectives and ensure the sustainable development of the UK marine area. While the Proposed Development does not directly affect the wider marine environment, some temporary activities (Work 10B) and permanent minor components (parts of Works 4B, which will only be developed if the canal abstraction option is not available (this being secured by a requirement in the draft DCO), and 5) of the





Proposed Development are proposed within the estuarine waters of the river Trent and therefore the UK MPS is of relevance.

- 3.3.32 Relevant high level marine objectives relevant to the Proposed Development include:
  - achieving a sustainable marine economy:
    - infrastructure is in place to support and promote safe, profitable and efficient marine businesses.
  - ensuring a strong, healthy and just society:
    - people appreciate the diversity of the marine environment, its seascapes, its natural and cultural heritage and its resources and act responsibly;
    - the use of the marine environment is benefiting society as a whole, contributing to resilient and cohesive communities that can adapt to coastal erosion and flood risk, as well as contributing to physical and mental wellbeing;
    - the coast, seas, oceans and their resources are safe to use;
    - the marine environment plays an important role in mitigating climate change; and
    - there is equitable access for those who want to use and enjoy the coast, seas and their wide range of resources and assets and recognition that for some island and peripheral communities the sea plays a significant role in their community.
  - living within environmental limits:
    - biodiversity is protected, conserved and where appropriate recovered and loss has been halted.
- 3.3.33 Chapter 3 of the UK MPS sets out sectoral issues, such as defence and national security, ports and shipping, and marine aggregates. A recognised sector is energy production and infrastructure development (3.3). It is acknowledged that the UK offshore area is considered to be one of the most promising locations anywhere in the world to permanently store carbon dioxide (Paragraph 3.3.31).
- 3.3.34 The East Inshore and East Offshore Marine Plans (Department for Environment, Food and Rural Affairs, 2014) establishes the plan led system for the marine area in which the riverine parts of the Proposed Development Site are located.
- 3.3.35 In **section 2**, the vision and objectives for the East marine plan areas is stated. The vision (page 23) comprises:

"By 2034, sustainable, effective and efficient use of the East Inshore and East Offshore Marine Plan Areas has been achieved, leading to economic development while protecting and enhancing the marine and coastal environment, offering local communities new jobs, improved health and well-





being. As a result of an integrated approach that respects other sectors and interests, the East marine plan areas are providing a significant contribution, particularly through offshore wind energy projects, to the energy generated in the United Kingdom and to targets on climate change."

- 3.3.36 **Section 3** comprises the plan policies. Key policies include:
  - Policy EC1: "Proposals that provide economic productivity benefits which are additional to Gross Value Added currently generated by existing activities should be supported.";
  - Policy EC2: "Proposals that provide additional employment benefits should be supported, particularly where these benefits have the potential to meet employment needs in localities close to the marine plan areas.";
  - Policy SOC3, which requires that proposals that affect the terrestrial or marine character of an area firstly avoid, or then mitigate, or then justify, these effects;
  - Policy BIO1, which requires appropriate weight should be attached to biodiversity, using an evidence based approach;
  - Policy BIO2, which requires that where appropriate, proposals for development should incorporate biodiversity and geological enhancement;
  - Policy CCS1, which seeks to ensure that sufficient offshore storage sites are available for CCS over the long term in view of the importance of the East marine areas to England's CCS potential;
  - Policy CCS2, which requires CCS proposals to demonstrate consideration of the re-use of existing oil and gas infrastructure rather than the installation of new infrastructure;
  - Policy CC1, which requires proposals to incorporate climate change mitigation and adaptation, and minimise impacts on adaptation and mitigation measures;
  - Policy CC2, which requires the minimisation of GHG emissions; and
  - Policy PS3, which requires that proposals firstly avoid, or then mitigate, or then justify, interfering with current and future port and harbour expansion opportunities.
- 3.3.37 **Section 3.11** 'Carbon Capture and Storage' recognises that combustion (e.g., gas-fired) power stations *"may want to utilise coastal or estuarine sites within the East inshore plan area to make use of once through water cooling systems for efficiency and economic purposes,"* (Paragraph 325).
- 3.3.38 Paragraph 326 recognises that:

"The East marine plan areas afford a significant opportunity for the industry due to the large number of saline aquifers within the Bunter sandstone formation. Saline aquifers are estimated as having around 85% of the United Kingdom's





potential storage capacity. Also, there are significant active and inactive hydrocarbon fields that could be used for storage. In addition, several clusters of industrial facilities emitting large amounts of carbon dioxide occur along England's East coast."

3.3.39 While the Proposed Development does not include any offshore transport or storage infrastructure – that being developed by the NEP –this demonstrates that the wider CCS aspirations for the ZCH are consistent with the MPS.

#### 3.4 Summary

- 3.4.1 Under the 2008 Act regime, the primary policy framework for examining and determining applications for development consent is provided by NPSs. **Section 104** of the 2008 Act requires the SoS to determine applications for NSIPs in accordance with the relevant NPSs, where these are in place, having regard to a number of specified matters (e.g. appropriate marine policy documents, any local impact report etc.), including any other matters which the SoS thinks are both "important and relevant" to their decision.
- 3.4.2 **Section 104** relates to where there is a NPS in place for the type of development set out in the application. A number of NPSs have been designated in relation to energy infrastructure (EN-1 to EN-6). There are relevant NPSs in place for elements of the Proposed Development, including the electricity generating station including the carbon capture plant (EN-1 and EN-2) and the associated development (EN-1, EN-4 and EN-5). EN-1 contains policy on carbon capture (carbon capture readiness and carbon capture and storage) as well as on the environmental impacts of development, which are relevant. EN-2 contains further information on carbon capture, in particular in the context of coal power stations and the demonstration programme in place at the time of publication, but which possess a degree of relevance to the determination of a carbon capture equipped gas fired generating station such as the Proposed Development.
- 3.4.3 The energy NPS, in particular EN-1, confirm the need that exists for developing new nationally significant energy infrastructure, including new gas-fired generating stations with CCS in order to underpin the security of UK electricity supplies (providing flexible back-up generation to renewables) and support the transition to a low carbon economy. EN-1 makes clear that the SoS should assess applications on the basis that this need and its scale and urgency has been proven and that substantial weight should be given to the contribution that all development make toward satisfying this need. Although the EWP includes a commitment to review the current suite of energy NPSs, while that review is undertaken, they remain relevant Government policy for the purposes of making decisions on energy NSIPs. The EWP itself represents government policy and its support for CCS power generation and CCUS clustering is discussed in **Section 4** of this Planning Statement. The range of recent policy, guidance and evidence set out in **Section 4** demonstrates the continued relevance and urgency of the need case set out in EN-1.





- 3.4.4 One of the main objectives, and a key benefit of the Proposed Development, is to demonstrate flexible, dispatchable gas-fired generation with CCS at a commercial scale in the UK. It meets the requirement for new fossil fuel generating station at or above 300 MW to be CCR, with CO2 emissions being captured from day one of the commercial operation of the electricity generating station, which is controlled via a requirement in Schedule 2 of the draft DCO (**Application Document Ref. 2.1**). The Proposed Development would therefore help underpin the security of UK electricity supplies while supporting the transition to a low carbon economy and the achievement of the Government's Net Zero by 2050 target. As such, it accords with a key policy objective of EN-1 (and the EWP), to deliver new low carbon electricity generating capacity.
- 3.4.5 The Proposed Development would support the delivery of NPS policy more generally. Each technical chapter of the ES (Chapters 8-19 (ES Volume I **Application Document Ref. 6.2**)) explains the policies in the NPS that have informed, and are informing, the design, assessment, and controls applicable to the Proposed Development.
- 3.4.6 EN-2 (DECC, 2011b) does not prescribe locations for this type of energy NSIP but establishes criteria by which developers should identify suitable sites. Both Section 2: Planning History and Local Planning Designations of this Planning Statement, and Chapter 3: The Site and Surrounding Area (ES Volume I Application Document Ref. 6.2) explains the suitability of the chosen site for the Proposed Development and therefore the need for this general type of development corresponds to a need for the Proposed Development.
- 3.4.7 The Proposed Development is consistent with and supportive of the economic, employment, energy, and climate change policies of the UK MPS. **Section 6** of this Planning Statement sets out how the Proposed Development has avoided and minimised impacts on marine character and provided opportunities for biodiversity enhancement as sought by other UK MPS policies.
- 3.4.8 The Proposed Development's compliance with the assessment principles and generic and technology specific impacts of the relevant NPSs is dealt with in section.







### 4.0 UK ENERGY AND CLIMATE CHANGE POLICY

#### 4.1 Introduction

- 4.1.1 In making decisions on applications for NSIP, **Section 104** of the 2008 Act states that the SoS must also have regard to any other matters that they consider to be both 'important and relevant' to their decision.
- 4.1.2 A body of recent energy and climate change law, policy, and guidance is of potential relevance and is described below. Collectively, these provide further support to the urgent need for new energy infrastructure, including carbon capture equipped power stations, set out in EN-1, providing energy security and enabling the development of CCUS clustering in support of a net zero economy. This section provides an overview of said law, policy and guidance.

### 4.2 The Energy White Paper – Powering our Net Zero Future (HM Government, 2020a)

- 4.2.1 The EWP, was presented to Parliament in December 2020 and builds on the Prime Minister's Ten Point Plan for a Green Industrial Revolution (HM Government, 2020), which is discussed below. At the core of the EWP is the commitment to achieve Net Zero and tackle climate change. The EWP seeks to put in place a strategy for the wider energy system that transforms energy, supports a green recovery and creates a fair deal for consumers (page 4). As with the Ten Point Plan, the EWP confirms the Government's support for CCUS (drawing upon the resource provided by the North Sea) and new hydrogen technologies.
- 4.2.2 The Government estimates (Introduction, page 15) that the measures in the EWP could reduce emissions across power, industry and buildings by up to 230 million tonnes of carbon dioxide (Mt CO<sub>2</sub>e) in the period to 2032 and enable further savings in other sectors such as transport. In doing so, these measures could support up to 220,000 jobs per year by 2030. These figures include the energy measures from the Ten Point Plan as well as additional measures set out in the EWP. However, the EWP recognises that more will need to be done to meet key milestones on the journey to Net Zero.
- 4.2.3 The EWP (pages 16 17) provides an overview of the Government's key policies and commitments to put the UK on the course to Net Zero. These are grouped under a number of headings, including 'Transform Energy', 'Support a Green Recovery from Covid-19' and 'Creating a Fair Deal for Consumers'. Those of particular relevance to the Proposed Development are as follows:

### Transform Energy

 "Supporting the deployment of CCUS in four industrial clusters including at least one power CCUS project, to be operational by 2030 and putting in place the commercial frameworks required to help stimulate the market to deliver a future pipeline of CCUS projects".





Support a Green Recovery from COVID-19

- "Increasing the ambition in our Industrial Clusters Mission four-fold, aiming to deliver four low-carbon clusters by 2030 and at least one fully net zero cluster by 2040.
- Investing £1 billion up to 2025 to facilitate the deployment of CCUS in two industrial clusters by the mid-2020s, and a further two clusters by 2030, supporting our ambition to capture 10Mt CO<sub>2</sub>e per year by the end of the decade."
- 4.2.4 Chapter 2 of the EWP deals with 'Power' with the stated goal being to use electricity to enable the transition away from fossil fuels and decarbonise the economy cost-effectively by 2050. Figure 3.2 'Electricity demand, Net Zero scenarios' (page 42) highlights how electricity demand could double by 2050 as electricity replaces the use of petrol and diesel in transport and to some extent, gas for heating. This would require a four-fold increase in clean electricity generation with the decarbonisation of electricity being required to underpin the delivery of the Net Zero target.
- 4.2.5 Despite the push to increase clean electricity generation and decarbonise the power sector, the EWP states that the Government is not targeting a particular generation mix by 2050 and its view remains that the electricity market should determine the best solutions for very low emissions and reliable supply, at a low cost to consumers (page 42). While the EWP (page 43) states that a low-cost, net zero consistent system is likely to be composed predominantly of wind and solar, in order to ensure the system is reliable, it needs to be complemented by technologies which provide power, or reduce demand, when the wind is not blowing, or the sun does not shine. This includes gas with CCS and short-term dispatchable generation providing peaking capacity, which can be flexed as required.
- 4.2.6 Figure 3.4 of the EWP (page 44) details different potential electricity mixes to 2050 and it is notable that gas with CCS is an important component of those mixes. Furthermore, linked to the commitment to support the deployment of at least one power CCUS project, the EWP (page 47) recognises that:

"In the power sector, gas-fired generation with CCUS can provide flexible, lowcarbon capacity to complement high levels of renewables. These characteristics mean that deployment of power CCUS projects will play a key role in the decarbonisation of the electricity system at low cost.

We will support at least one power CCUS plant to come forward and be operational by 2030 and will put in place a commercial framework which will enable developers to finance the construction and operation of a power CCUS plant and stimulate a pipeline of projects. This will enable at least one power CCUS project to be developed in one of the four industrial clusters as part of our mission to decarbonise them ..."





4.2.7 Chapter 3 "Energy System' of the EWP addresses 'The Role of Natural Gas' in a Net Zero world (page 84). It confirms that natural gas currently represents almost 30% of final energy consumption and 40% of electricity generation (page 84) and notes that we will continue to rely on natural gas for some years, even as we work to largely eliminate carbon emissions from the energy system, including those from gas. It goes onto state:

"We will therefore make sure the natural gas markets and networks evolve in a way which enables continued investment and ensure secure supplies but also promotes the use of low-carbon options, wherever possible. This will reduce emissions now and help build the networks of the future which will need to accommodate technologies such as hydrogen and Carbon Capture, Usage and Storage. We will need investment in the gas network to support the ambition set out in the Prime Minister's Ten Point Plan for a potential Hydrogen Town before the end of the decade."

4.2.8 The challenge of decarbonising industry is covered at Chapter 5 'Industrial energy' of the EWP, in particular, the need for emissions from industry to fall by around 90% from today's levels by 2050 if the Net Zero target is to be met (page 118). The EWP (page 120) highlights how about half of all emissions from manufacturing and refining are concentrated in the UK's major industrial clusters (EWP Figure 8.1). These 'hubs' are seen as critical drivers of local and regional economic activity and a vital component of the UK's national economy. It goes on to state (page 122):

*"Improved efficiency in the energy performance of buildings and industrial processes will lay the groundwork for the transformation of industrial energy. But we cannot rely on energy efficiency alone to reduce emissions in line with our 2050 goal. Manufacturing industry will need to capture their carbon for onward storage and switch from using fossil fuels to low-carbon alternatives."* 

- 4.2.9 The EWP notes (page 124) that many clusters are located in regions in need of economic revitalisation and that decarbonising those clusters can act as a driver of prosperity for the surrounding areas. Furthermore, that investments in key technologies like CCUS will be crucial to enhancing local economic growth and creating jobs together with prosperity.
- 4.2.10 CCUS is dealt with in detail at pages 125 and 126 of the EWP. The EWP confirms that the deployment of CCUS is fundamental to the decarbonisation of energy intensive industries such as steel, cement, oil refining and chemicals. It highlights the role of CCUS in helping to secure the long-term future of these industries and enabling the production of low-carbon hydrogen at scale. It reaffirms the Government's commitment to invest £1 billion (up from the £800m promised in the CCS Infrastructure Fund) up to 2025 to facilitate the deployment of CCUS in two industrial clusters by the mid-2020s, and a further two clusters by 2030, supporting its ambition to capture 10Mt CO<sub>2</sub> emissions per year by the end of the decade. It stresses how the UK is in a strong position to become a global technology leader in CCUS, with the potential to store 78





billion tonnes of carbon dioxide. It recognises that deployment of CCUS could create new markets for UK businesses, at home and abroad, as other countries look to meet their emissions reduction commitments and could support 50,000 jobs in the UK by 2030.

- 4.2.11 The important supporting role of CCUS in the production of clean hydrogen is underlined at pages 127 and 128 of the EWP.
- 4.2.12 The Proposed Development would clearly help deliver key Government policies and commitments on CCUS set out in the EWP (HM Government, 2020a).

### 4.3 National Infrastructure Plans & Assessments

National Infrastructure Plan (HM Treasury, 2014)

- 4.3.1 The National Infrastructure Plan (HM Treasury, 2014) (the 'NIP 14') sets out a vision for the UK's infrastructure, reinforcing the Government's commitment to investing in infrastructure and improving its quality and performance.
- 4.3.2 Chapter 1 of the NIP 14 sets out the Government's strategy for infrastructure. Paragraph 1.1 emphasises the strong case for infrastructure investment and that this has a significant positive effect on output, productivity, and growth rates, being a key driver for jobs throughout the economy. The Executive Summary highlights the economic benefits of infrastructure investment, including:
  - for every £1 billion spent on infrastructure investment, 5,000 construction jobs could be supported as well as many more indirectly in design, engineering and planning; and
  - for every £1 spent on infrastructure construction there is an increase of £2.84 in overall economic activity.
- 4.3.3 Chapters 3 to 13 of the NIP 14 deal with different infrastructure sectors. Chapter 8 deals with 'Energy'. It reports on the progress made since 2010, with 20GW of new electricity capacity created (enough for 23 million homes), much of it being low carbon or renewable. However, a key objective of the NIP 14 in terms of energy investment (paragraph 8.1) is to "...reduce carbon emissions in order to mitigate climate change and meet legally binding targets."
- 4.3.4 Paragraph 8.3 states that large-scale investment in gas and low-carbon electricity generation is vital in order to replace ageing energy infrastructure, maintain secure energy supplies and meet legally binding environmental targets. Around £100 billion of investment is estimated to be required in electricity generation and networks by 2020. Paragraph 8.5 continues:

"As legacy coal, gas and nuclear power stations come offline, they will increasingly be replaced with a combination of renewable energy, new nuclear power <u>and fossil fuel power stations fitted with Carbon Capture and Storage</u> (CCS) technology. New gas plant is also needed as a vital backup for less





<u>flexible renewable generation and to ensure that the system can meet peak</u> <u>electricity demand.</u> Demand for gas to supply heat to homes and businesses will also remain significant for some time to come." [underlining added]

- 4.3.5 The NIP 14 therefore recognises the continuing need for new gas-fired power stations to provide back-up to less flexible renewable generation. The provision of such infrastructure is critical to ensure that the National Grid Electricity Transmission System can meet peak electricity demand as the amount of renewable generation increases. The clear inference though is that for fossil fuel power stations to remain part of the energy mix in the long-term, they should be fitted with CCS technology if that can be shown to be commercially viable.
- 4.3.6 At paragraph 8.28 the NIP 14 sets out the Government's Top 40 'Priority Investments' to support its objectives for the energy sector. Alongside increased generation from renewables and new nuclear these include more electricity generation from gas and the deployment of carbon capture and storage.
- 4.3.7 The Proposed Development would contribute to the delivery of the NIP 14 and in particular the Government's objectives for the energy sector through the deployment of a new gas-fired power station that is fitted with CCS technology. The Proposed Development would assist with moves to decarbonise the power sector, while ensuring the security of electricity supplies and supporting the continued deployment of renewables.

National Infrastructure Delivery Plan 2016-2021 (Infrastructure and Projects Authority, 2016)

4.3.8 The National Infrastructure Delivery Plan (2016 - 2021) (the 'NIDP') was published in March 2016 by the Infrastructure and Projects Authority reporting to HM Treasury and Cabinet Office and builds upon the NIP 14 and brings together the Government's plans for economic infrastructure over a five-year period (2016 - 2021) with those to support the delivery of housing and social infrastructure. The Executive Summary (page 7) states that:

"This is reflected by the government's commitment to invest over £100 billion by 2020-21, alongside significant ongoing private sector investment in our infrastructure."

4.3.9 The NIDP (Chapter 1, paragraphs 1.3 - 1.4) highlights the importance of establishing the right framework to deliver infrastructure. This means having organisations with a clear purpose and clear responsibilities that can work together to plan the development of UK infrastructure. It goes onto state:

"1.3 ... To support this, the government has set up 2 new bodies – the Infrastructure and Projects Authority and an independent National Infrastructure Commission – to ensure the right infrastructure projects are identified and delivered successfully.





1.4 These organisations are complementary and together will ensure a comprehensive approach to infrastructure planning across both the relatively short term (to 2020-21) and the very long terms (to 2050), through the National Infrastructure Assessment."

4.3.10 Chapter 5 of the NIDP deals with 'Energy' and sets out the key projects and programmes in this sector over the period 2016 - 2021 (paragraph 6.28). It identifies the continuing importance of gas in heating our homes (and that UK gas supplies are amongst some of the cheapest and most secure in Europe) and the need for new high efficiency Combined Cycle Gas Turbine (CCGT) technology to come forward.

National Infrastructure Assessment (The National Infrastructure Commission, 2018)

- 4.3.11 The National Infrastructure Commission (the 'NIC') was established in 2015 to provide independent, impartial advice on the UK's long-term infrastructure needs.
- 4.3.12 In the National Infrastructure Assessment (the 'NIA 18'), published in July 2018, the NIC has looked across different infrastructure sectors and come to independent conclusions based on the best available evidence. The foreword to the NIA 18 (page 3) confirms that it sets out a clear, long term strategy for the UK's economic infrastructure from 2020 to 2050, providing long term clarity for industry and the supply chain.
- 4.3.13 The NIA 18 sets out a number of recommendations (page 5) and the Government has committed to respond to the NIC's recommendations and to adopt agreed recommendations as government policy. One of the key themes is 'Low cost, low carbon' with the NIA 18 stating (page 9) that the UK can and should have low cost and low carbon electricity, heat and waste.

### 4.4 Net Zero – Opportunities for the power sector (National Infrastructure Commission, 2020)

- 4.4.1 In March 2020, the NIC published a report entitled 'Net Zero Opportunities for the power sector') (the 'Net Zero Report'), in order to update the modelling, assumptions and recommendations in the NIA 18 and respond to the Government's decision in June 2019 to legislate for a Net Zero GHG emissions target for the whole economy by 2050, via the Climate Change Act 2008 (2050 Target Amendment) Order 2019 (HM Government, 2019).
- 4.4.2 The Net Zero Report details work that looks at the total electricity costs of delivering a Net Zero compatible electricity system by 2050. Two different electricity demand scenarios are examined. One involves the electrification of heating and the other hydrogen for heating. Additionally, the Net Zero Report considers the impact that either hydrogen or bioenergy could have if deployed in the power sector (Executive Summary page 7).





- 4.4.3 The Net Zero Report explains that since NIA 18 and the Government's Net Zero Target, reductions in the cost of renewables have outstripped forecasts, and that its analysis reaffirms the case for the Commission's recommendation in NIA 18 to deliver at least 50 per cent renewable generation by 2030 as part of the transition to a highly renewable generation mix.
- 4.4.4 The NIC's analysis of 2050 generation and capacity mixes states that the same technologies as set out in NIA 18, and in broadly similar quantities, are still likely to be needed in the long term. This includes at least 18 GW of gas with CCS capacity needed by 2050 across all scenarios. The Net Zero Report notes that by 2050, gas will primarily play a peaking role in the electricity generating system and that residual emissions from not capturing 100% of the carbon dioxide are likely to limit its role in providing bulk baseload generation in a Net Zero power system, unless high capture rates are achieved (pages 18 19 including Figures 5 and 6).
- 4.4.5 Net Zero Opportunities for the power sector' therefore highlights the important role of CCS in decarbonising the power sector by capturing carbon dioxide from new gas-fired generation.

### 4.5 Clean Growth Strategy

- 4.5.1 The 'Clean Growth Strategy Leading the way to a low carbon future' (Department for Business, Energy & Industrial Strategy, 2017) ('the CGS') sets out the aims of the Government to deliver increased economic growth while reducing carbon emissions. It estimates that the low carbon economy could grow 11% per year between 2015 and 2030, four times faster than the projected growth of the economy as a whole.
- 4.5.2 The Executive Summary (page 9) confirms that for the UK to achieve its fourth and fifth carbon budgets (2023 - 2027 and 2028 - 2032) it will be necessary to drive a significant acceleration in the pace of decarbonisation. The Executive Summary (pages 12-16) also sets out a number of key policies and proposals relating to 'Improving Business and Industry Efficiency'. These include to:

*"4. Publish joint industrial decarbonisation and energy efficiency action plans with seven of the most energy intensive industrial sectors;* 

5. Demonstrate international leadership in carbon capture usage and storage (CCUS), by collaborating with our global partners and investing up to £100 million in leading edge CCUS and industrial innovation to drive down costs.

6. Work in partnership with industry, through a new CCUS Council, to put us on a path to meet our ambition of having the option of deploying CCUS at scale in the UK, and to maximise its industrial opportunity.

7. Develop our strategic approach to greenhouse gas removal technologies, building on the Government's programme of research and development and addressing the barriers to their long-term deployment."





4.5.3 Chapter 3 (page 47) of the CGS sets out the Government's approach and states:

"...we must create the best possible environment for the private sector to innovate and invest. Our approach will mirror that of our Industrial Strategy: building on the UK's strengths ...; improving productivity across the UK; and ensuring we are the best place for innovators and new business to start up and grow. We are clear about the need to design competitive markets and smart regulation to support entrepreneurs and investors who will develop the new technologies at the scale we need.

... we are laying the groundwork for major decisions in the areas where we face greatest uncertainty and challenge: in how we work with industry to make carbon capture, usage and storage (CCUS) a viable future option."

4.5.4 Page 49 of the CGS goes on to state that:

"We want to use the power of Government to support innovation in a low carbon economy using all the tools available to us, including market design, taxation and regulation, as well as investment in our education systems, our science base and innovative companies. Our aim is to become one of the best places in the world for low carbon innovation."

- 4.5.5 Chapter 3 of the CGS 'Our Clean Growth Strategy' sets out the various projects that have been announced as part of the 'BEIS Energy Innovation Programme' (Department for Business, Energy & Industrial Strategy, 2017) (page 50). This includes up to £20 million of investment in a carbon capture and utilisation demonstration (CCUD) programme.
- 4.5.6 The Proposed Development would accord with the Government's approach set out above, in particular, removing uncertainty and working with industry to make CCUS a viable option.
- 4.5.7 Chapter 4 of the CGS deals with different sectors of the UK economy. Pages 61-71 deal with 'Improving Business and Industry Efficiency and Supporting Clean Growth'. Page 62 confirms that business and industry account for approximately 25% of the UK's emissions and 50% of its electricity use. This section of Chapter 4 sets out various policies and proposal to increase energy efficiency on business and industry. However, it is acknowledged (page 64) that energy intensive industries will require steps beyond energy efficiency:

"Out to 2030, this will require industry to make progress in switching from fossil fuel use to low carbon fuels such as sustainable biomass, in line with broader Government priorities in delivering on clean air, and clean electricity. Beyond 2030, this switching will need to substantially increase in scale and be coupled with the deployment of new technologies, for example, carbon capture, usage and storage (CCUS). Over the course of this Parliament, we will therefore also develop a framework to support the decarbonisation of heavy industry."





4.5.8 Page 69 deals with CCUS in detail. It states:

"There is a broad international consensus that carbon capture, usage and storage (CCUS) has a vital role in reducing emissions. This could be across a wide range of activities such as producing lower-emission power, decarbonising industry where fossil fuels are used and/or industrial processes as well as providing a decarbonised production method for hydrogen which can be used in heating and transport. This makes CCUS a potentially large economic opportunity for the UK. The International Energy Agency estimates there will be a global CCUS market with over £100 billion – even a modest share of this global market, UK GVA could increase between £5 billion and £9 billion per year by 2030."

- 4.5.9 Subsequently one of the 'Grand Challenges' missions set by government (first published in September 2019 and most recently updated 26 January 2021) was confirmed as 'to establish the world's first Net-Zero carbon industrial cluster by 2040 and at least 1 low-carbon cluster by 2030'. The Grand Challenges were recently updated in January 2021, with the mission now to have at least 4 low-carbon clusters by 2030. In March 2020 £800 million funding was confirmed in the Budget to establish two or more new carbon capture and storage clusters by 2030. The Proposed Development is sited to be able to connect into the Zero Carbon Humber (ZCH) Partnership cluster. Furthermore, BEIS ran a consultation between February and March 2021 entitled "Carbon capture, useage and storage: market engagement on cluster sequencing".
- 4.5.10 Pages 93 101 of Chapter 4 cover 'Delivering Clean, Smart, Flexible Power'. The overriding objective is to deliver a reduction in emissions from the power sector. Page 96 states that in order to achieve this it will be necessary to continue to bring down the costs of low carbon generation from renewables and nuclear and ensure that the UK can deploy CCUS at scale during the 2030s. Page 101 reiterates that Government's commitment to supporting CCUS innovation and deployment through the BEIS Energy Innovation Programme.
- 4.5.11 The Proposed Development would clearly contribute to the delivery of the CGS in terms of the Government's objective to decarbonise both the industrial and energy sectors.

# 4.6 Clean Growth – The UK Carbon Capture Usage and Storage deployment pathway – An Action Plan (Department for Business, Energy & Industrial Strategy, 2018)

4.6.1 'Clean Growth – The UK Carbon Capture Usage and Storage deployment pathway - An Action Plan' (Department for Business, Energy & Industrial Strategy, 2018) ('the Action Plan') was published by the Government in 2018. The Executive Summary (pages 5 and 6) confirms that the Government's vision is for the UK to become a global leader in CCUS. The Action Plan is aimed at enabling the development of the first CCUS facility in the UK, with commissioning in the mid-2020s, which would support the ambition of being





able to deploy CCUS at scale during the 2030s, subject to the costs coming down sufficiently. It goes on to state (page 6):

"Through our Clean Growth Strategy, we re-affirmed our commitment to the domestic deployment of CCUS subject to cost reductions. This Plan sets out our next steps to progress this commitment."

- 4.6.2 The Action Plan states that this can only be achieved through close Government and Industry partnership (page 14). The CCC, is guoted as emphasising the importance of CCUS to cost reductions "as well as its crucial role in enabling deeper emissions reduction beyond that". Modelling by the Energy Systems Catapult ('ESC') for the Energy Technologies Institute ('ETI') supports the conclusion by the CCC that energy system decarbonisation could be up to 50% cheaper by 2050 if CCUS is deployed at scale and concludes that delaying deployment beyond the 2020s will increase the risks of decarbonising the UK's energy system. Both the CCC and ETI analysis conclude that initial deployment is required during the 2020s in order to have the option of deploying at scale during the 2030s, and in particular to keep open the option of UK CCUS deployment towards the scale that both state are required in 2050. This timeline was endorsed by the CCUS Cost Challenge Taskforce, and the conclusion was also reached by the Parliamentary Advisory Group on CCS (2016). A key message from all these independent bodies is that deployment of CCUS during the 2020s is essential to unlock the greatest opportunities for cost reduction.
- 4.6.3 At page 32 (Industrial decarbonisation with CCUS) the Action Plan highlights the importance of CCUS in decarbonising energy intensive industries ('EIIs'), including iron and steel, cement, chemicals, and oil refining. It goes on to state:

"Some of these industries produce volumes of emissions from chemical processes, in addition to combustion of fossil fuels, for example, up to 70% of emissions from cement production are from the process of producing cement, rather than from energy use. These emissions cannot be abated by fuel switching or electrification.

Overall, CCUS could provide 37% of the total abatement potential in Ells by 2050. A recent study by McKinsey on decarbonising Ells showed that where carbon dioxide storage sites are accessible, CCUS is the lowest-cost decarbonisation option at current commodity prices. CCUS also enables the large-scale use of hydrogen as an industrial fuel, which the recent CCC and Element Energy reports have indicated could be one cost-effective pathway to industrial decarbonisation."

4.6.4 The Action Plan (pages 35 to 37) also highlights the role of CCUS in decarbonising electricity generation, alongside an expansion of other forms of low and zero-carbon power generation to achieve 'deep decarbonisation' of the UK power sector.





4.6.5 The Proposed Development is consistent with the vision and ambition of the Action Plan.

### 4.7 'Net Zero' by 2050 (HM Government, 2019)

- 4.7.1 On 27 June 2019, the 'Climate Change Act 2008 (2050 Target Amendment) Order 2019' came into force. The Order enshrines within UK law, the commitment to achieve 'Net Zero' in terms of GHG emissions by 2050. The Order amended the previous target (within the Climate Change Act 2008) which was seeking achievement of a reduction in GHG emissions of 80% by 2050 compared to 1990 levels.
- 4.7.2 The commitment to achieve 'Net Zero' by 2050 was based on the recommendations of the CCC set out in its report 'Net Zero The UK's Contribution to Stopping Global Warming' (CCC, 2019) (the 'CCC Report'). The CCC Report is clear that if Net Zero is to be achieved, the remaining GHG emissions will need to be offset by removing carbon dioxide and permanently sequestering it through technologies such as CCUS. The CCC Report identifies CCUS as having a key role to play in mitigating GHG emissions.
- 4.7.3 The important role of CCUS is also stressed in terms of capturing the carbon dioxide from non-renewable electricity production, industry and the production of hydrogen (given the ambition to move to a hydrogen economy that is seen as critical to achieving Net Zero) (page 23). The scenarios considered involve the aggregate annual capture and storage of 75 175Mt CO<sub>2</sub> in 2050, which would require major carbon dioxide transport and storage infrastructure servicing at least five clusters. The CCC Report concludes that CCUS is a necessity for the UK, not an option.

#### 4.8 Net Zero Technical Report (CCC, 2019)

- 4.8.1 The Committee on Climate Change's (CCC) is an independent, statutory body that was established under the Climate Change Act 2008 in order to advise the UK and devolved governments on emissions targets and to report to Parliament on progress made in reducing GHG emissions and preparing for and adapting to the impacts of climate change.
- 4.8.2 In the technical report the CCC identified a need for gas-fired electricity generation with Carbon Capture and Storage ('CCS') in order to hit the Net Zero 2050 target.

### 4.9 Reducing UK emissions: 2020 Progress Report to Parliament (Committee for Climate Change, 2020)

4.9.1 The CCC issued its latest progress report 'Reducing UK emissions: 2020 Progress Report to Parliament', in June 2020 (the 'Progress Report'). The Progress Report (required under Climate Change Act 2008) provides an annual review of UK progress in reducing GHG emissions. This followed a May 2020 update published on the CCC's website, which raised concerns over the UK's





ability to meet its fourth (2023 - 27) and fifth (2028 - 32) carbon budgets (despite these being set against the previous target of an 80% reduction in emissions by 2050) and stressed the need, in view of the more challenging Net Zero target, for progress on emissions reductions to be accelerated.

- 4.9.2 Much of the Progress Report focuses on providing advice to government on delivering a recovery from Covid-19 that both accelerates the transition to Net Zero and strengthens the UK's resilience to the impacts of climate change, whilst driving new economic activity. The Executive Summary (page 13) raises concern that over the preceding 12 months, the UK Government has not made the policy progress that the CCC called for in 2019 and it highlights the importance of the EWP including measures to expand supplies of low-carbon power, encourage a resilient and flexible energy system and provide enduring market mechanisms to drive investment in low-carbon industrial technologies and industrial sectors.
- 4.9.3 At page 18, the Executive Summary calls for the NIS to set a vision for infrastructure development over the next 30 years consistent with Net Zero and that important priorities should include "carbon storage infrastructure". It goes on to state that the Government has consulted on mechanisms to incentivise CCS and announced a £250m 'Clean Steel Fund':

"However, coverage of these policies is far too narrow and progress has been too slow, as has delivery of the existing £600m capital funds for decarbonising manufacturing. There is still no strategic approach to drive change at the required scale and pace." (page 19)

"A funding mechanism is needed for the operational costs of demonstration and early deployment of industrial electrification and hydrogen use as well as carbon capture and storage (CCS). Faster deployment of announced funds would support jobs, skills and the recovery, while enabling crucial progress on decarbonisation." (page 21)

- 4.9.4 The Executive Summary sets out the CCC's recommendations by government department. Table 4 of the Executive Summary sets out recommendations for the BEIS. At page 28 these cover CCS and include:
  - choosing a preferred funding model and mechanism for delivering carbon dioxide infrastructure – by 2020;
  - planning for carbon capture plant to be operational at multiple clusters by the mid-2020s; and
  - supporting business models for CCS designed for use in industry, electricity production and GHG removals – by 2020/ongoing.
- 4.9.5 Chapter 1 of the Progress Report 'A review of the climate challenge after COVID-19' sets out 'Medium-term milestones' at Table 1.1 (pages 57 and 58) to be on track for Net Zero emissions, which include the following where there is a role for CCS:





"Industry – CO<sub>2</sub> transport and storage infrastructure operational, and hydrogen available, at multiple industrial clusters by the mid-2020s."

"Greenhouse gas removals – Initial deployment of engineered greenhouse gas removals (e.g. bioenergy with CCS (BECCS) in power generation, hydrogen production, industry and/or aviation fuel production), driven by incentives and enabled by CO<sub>2</sub> infrastructure development."

- 4.9.6 Chapter 2 'Progress since 2008' (page 68) highlights that while in the power sector there has been an increase in generation from low-carbon sources over the decade deployment of CCS technologies as a means of decarbonising industry has remained limited. CCS (page 80) is seen as a key pillar in achieving Net Zero, and the Progress Report stresses that significant progress is required in the 2020s to get on track to meeting the target by 2050. It goes onto state that CCS is yet to be developed at scale in the UK and that it must be a priority progress area for the 2020s.
- 4.9.7 Chapter 4 'Progress on emissions, indicators and policy in the last year' at Table 4.2 (pages 114 115) again highlights concerns over the lack of progress by the UK Government in terms of setting out a preferred mechanism for carbon dioxide transport and storage infrastructure and a plan to enable multiple CCS facilities to be operational by the mid-2020s. The Progress Report (page 117), however, welcomes the commitment by the Government to the £800m CCS Infrastructure Fund to establish CCS in at least two industrial clusters, as well as the £250m Clean Steel Fund adding to support of around £600m for industrial decarbonisation.
- 4.9.8 Chapter 5 'Planning a resilient recovery' (page 141) refers to how the CCC reconvened its Expert Advisory Group on the Costs and Benefits of Net Zero in May 2020 to consider the macro-economics of the Covid-19 pandemic and the role of climate change measures in supporting a recovery. The Group was clear that climate change policy should play a central role in efforts to rebuild from Covid-19 and set out a range of short and long-term measures to achieve this. This includes a recommendation (page 142) that investments in low-carbon and climate adaption infrastructure are at the heart of measures to restore economic growth following Covid-19 (page 142 Box 5.4). At pages 152, key priorities for infrastructure investments are identified as including:

"... new ... carbon capture and storage (CCS) infrastructure which will be needed to support the next phase of the net-zero transition."

4.9.9 Chapter 6 'What is needed now - UK climate policy' sets out the CCC's view on priorities for the UK Government in terms of achieving Net Zero. These include (page 167) showing clear leadership on CCUS with concrete and funded plans for deploying CCUS in the mid-2020s. Page 181 goes on to state that UK industry can be decarbonised to near-zero emissions without offshoring and that government must implement an approach to incentivise industries to





reduce emissions through energy and resource efficiency, fuel switching and CCS, amongst other measures.

4.9.10 The Progress Report set out a number of priorities for the EWP (page 184), including that:

"Carbon Capture and Storage is a necessity, not an option, for the UK's netzero objectives. Plans should be delivered for CCS to be operational at multiple industrial clusters from the mid-2020s, with ambition for scaling up infrastructure beyond this".

4.9.11 It is therefore clear that CCS/ CCUS is at the heart of the CCC's priorities and recommendations for UK Government.

### 4.10 The Ten Point Plan for a Green Industrial Revolution (HM Government, 2020b)

- 4.10.1 'The Ten Point Plan for a Green Industrial Revolution Building back better, supporting green jobs, and accelerating our path to net zero', was published on 18 November 2020 and is aimed at delivering a 'Green Industrial Revolution' in the UK, with the foreword by the Prime Minister stating that the Ten Point Plan will aim to mobilise £12 billion of government investment and potentially three times as much from the private sector, to create and support up to 250,000 green jobs. As mentioned above, the Ten Point Plan is followed on from and built on by the EWP.
- 4.10.2 The Introduction to the Ten Point Plan (pages 5 6) states that:

"We will generate new clean power with offshore wind farms, nuclear plants and by investing up to half a billion pounds in new hydrogen technologies. We will use this energy to carry on living our lives, running our cars, buses, trucks and trains, ships and planes, and heating our homes while keeping bills low. And to the extent that we still emit carbon, we will pioneer a new British industry dedicated to its capture and return to under the North Sea..."

4.10.3 The 'Ten Points' of the Plan are summarised at page 7 of the document. Of particular relevance to the Proposed Development is Point 8 – "Investing in Carbon Capture, Usage and Storage (CCUS)," dealt with at pages 22 - 23 of the Ten Point Plan. The Ten Point Plan states that CCUS will be an exciting new industry to capture the carbon we continue to emit and revitalise the birthplaces of the first Industrial Revolution. It states that the Government's ambition is to capture 10Mt of CO2 a year by 2030, the equivalent of four million cars' worth of annual emissions. It goes on to set out the Government's commitment to invest up to £1 billion to support the establishment of CCUS in four industrial clusters, creating 'transformative SuperPlaces' in areas such as the North East, the Humber, North West, Scotland and Wales. It notes that the Government will bring forward details in 2021 of a revenue mechanism to bring through private sector investment into industrial carbon capture and hydrogen projects via new business models to support these projects.





4.10.4 The Ten Point Plan (page 24) highlights the function and necessity of CCUS in achieving a green economy and the Government's commitment to establish CCUS in two industrial clusters by the mid-2020s:

"CCUS technology captures carbon dioxide from power generation, low carbon hydrogen production and industrial processes, storing it deep underground where it cannot enter the atmosphere. This technology will be globally necessary, but no one country has yet captured the market. The UK has an unrivalled asset – our North Sea, that can be used to store captured carbon under the seabed. Developing CCUS infrastructure will contribute to the economic transformation of the UK's industrial regions, enhancing the longterm competitiveness of UK industry in a global net zero economy. It will help decarbonise our most challenging sectors, provide low carbon power and a pathway to negative emissions. We will establish CCUS in two industrial clusters by mid 2020s, and aim for four of these sites by 2030, capturing up to 10 Mt of carbon dioxide per year. Developed alongside hydrogen, we can create these transformative "SuperPlaces" in areas such as the heart of the North East, the Humber, North West and in Scotland and Wales. Our £1 billion CCUS Infrastructure Fund will provide industry with the certainty required to deploy CCUS at pace and at scale. These clusters will be the starting point for a new carbon capture industry, which could support up to 50,000 jobs in the UK by 2030, including a sizeable export potential. Alongside this, we will bring forward details in 2021 of a revenue mechanism to bring through private sector investment in industrial carbon capture and hydrogen projects, to provide the certainty investors require."

4.10.5 The Proposed Development would establish CCUS and would therefore support delivery of Point 8 of the Ten Point Plan and the creation of the type of "hub" or "SuperPlace" envisaged by the Plan where renewable energy, CCUS and hydrogen technologies could agglomerate and generate significant numbers of jobs.

#### 4.11 National Infrastructure Strategy: Fairer, faster, greener (HM Treasury, 2020)

- 4.11.1 The NIS was published on 25 November 2020, a week after the Prime Minister's Ten Point Plan. The NIS sets out the Government's plans to deliver an infrastructure revolution in the UK, while "levelling the country up" and achieving its Net Zero target by 2050. It also provides the Government's formal response to the NIC's recommendations on infrastructure provision in their National Infrastructure Assessment (NIC, 2018).
- 4.11.2 Chapter 2 'Levelling up the whole of the UK' (page 27) highlights how the Government wants to use infrastructure to unite and level up the UK by prioritising those areas that have received the least support in the past and to create 'regional powerhouses'. One of the measures identified to achieve this, is backing new green growth clusters in traditional industrial areas, with investment in CCS, offshore wind, port infrastructure and low-carbon hydrogen production.





4.11.3 A key theme of the NIS is 'Decarbonising the economy and adapting to climate change' and this is dealt with at Chapter 3. The Government identifies that (page 48) new technologies and skills will need to be developed to continue decarbonising and recognises that it will have a role to play in driving both the development and deployment of such technologies, including:

"Investment in these areas, where the UK has competitive advantage, can create the knowledge and skills needed for a green industrial revolution, driving leadership in the industries of the future, reducing national and global emissions, as well as providing the platform for significant economic growth. Where these investments are brought together to create place-based industrial clusters they can transform local economies, creating productive jobs, developing specialist skillsets, and attracting private investment. For example, the North East of England could become a home of choice for companies delivering carbon capture and storage; making hydrogen power a part of daily life; and designing, building and maintaining offshore wind turbines."

- 4.11.4 The future role of CCS in contributing to the Net Zero target is further underlined in Chapter 3 of the NIS (pages 50 - 53). In terms of power, it is recognised that even by 2050, given the intermittent nature of renewables, there will still be requirement for more reliable sources of power, from nuclear or power stations that burn hydrogen or gas with CCS. Power stations with CCS could provide valuable low carbon electricity when renewables are not generating by capturing the emissions from biomass or gas-fired generation. CCS is also seen as essential to decarbonising large parts of industry, producing low carbon hydrogen and in delivering GHG removal technologies permanently locking away carbon dioxide.
- 4.11.5 Importantly (page 53), the NIS recognises the CCS/ CCUS technology has not yet been delivered at scale and that there is a key role for government to play in bringing this forward. Consistent with the Ten Point Plan, it therefore sets out the Government's increased ambition to support CCS with £1 billion of funding (up from £800m) to bring forward four CCS clusters by the end of the decade, with construction to begin on two by the mid-2020s with the aim of capturing 10Mt of carbon dioxide a year by 2030.
- 4.11.6 The Proposed Development comprises investment in CCS and contributes to the creation of a regional powerhouse. It will contribute to decarbonising the economy and contributing t the UK Governments Net Zero target.

### 4.12 Net Zero Strategy: Build Back Greener

<u>4.12.1 The Net Zero Strategy: Build Back Greener (HM Government, 2021) expands</u> on key commitments in the Energy White Paper, proposing to deliver "four carbon capture usage and storage (CCUS) clusters, capturing 20-30 MtCO2 across the economy, including 6 MtCO2 of industrial emissions, per year by 2030".





4.11.74.12.2 Setting aside 6 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 Power Stations of this size in order to meet the Government's commitments, or approximately 2-3 within each CCUS cluster. In conclusion the need case for the Proposed Development is greater as a result of the publication of the Energy White Paper.

### 4.13 Summary

- <u>4.13.1 The Proposed Development would support the delivery of the NIP 14, the CGS,</u> and support the statutory target of 'Net Zero' GHG emissions by 2050.
- <u>4.13.2</u> The Proposed Development is consistent with and supportive of the EWP which seeks to put in place a strategy for the wider energy system that transforms energy, supports a green recovery and creates a fair deal for consumers. At the core of the EWP is the commitment to achieving Net Zero and tackling climate change and it includes extensive support for CCUS. Part of the EWP details different potential electricity mixes to 2050 and it is notable that gas with CCS is an important component of those mixes.
- 4.11.84.13.3 The type of infrastructure comprised in the Proposed Development is identified in the CCC Technical Report as important for Net Zero and exceeds the requirements of NPS policy on CCR, through the inclusion of a CCP and by the Applicant working with industry partners to remove uncertainty around commercial scale CCUS.





## 5.0 NATIONAL PLANNING POLICY FRAMWORK AND THE LOCAL PLAN

### 5.1 Introduction

5.1.1 This section sets out the National Planning Policy Framework ('NPPF') and local plan policies of most relevance to the Proposed Development.

### 5.2 National Planning Policy Framework (Ministry of Housing, Communities & Local Government, June 2019July 2021)

- 5.2.1 The latest version of the NPPF was most recently updated in <u>June 2019July</u> <u>2021</u> (MHCLG, <u>2019a2021</u>). The policies contained within the NPPF are expanded upon and supported by the 'Planning Practice Guidance' (MHCLG, 2019b).
- 5.2.2 The NPPF sets out the Government's planning policies for England and how these are to be applied and is a material consideration in planning decisions. Paragraph 5 of the NPPF states that the document does not contain specific policies for NSIP and that applications in relation to NSIP are to be determined in accordance with the decision-making framework set out in the 2008 Act and relevant NPS, as well as any other matters that are considered both important and relevant. However, matters that can be considered to be both important and relevant to NSIP may include the NPPF and the policies within it.
- 5.2.3 Paragraph 7 of the NPPF is clear that the purpose of the planning system is to contribute to the achievement of sustainable development and that the policies that are set out in the Framework, taken as a whole, constitute the Government's view of what sustainable development in England means in practice. Paragraph 8 goes on to identify three overarching objectives to achieving sustainable development:
  - an economic objective to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;
  - a social objective to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a welldesigned and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and
  - an environmental objective to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently,





minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

5.2.4 Paragraph <u>148–152</u> in **Section 14** states that:

"The planning system should support the transition to a low carbon future in a changing climate ... it should help to: "shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure."

- 5.2.5 Paragraph <u>154–158</u> states that when determining application for renewable and low carbon development, there should be no requirement for applicants to demonstrate the overall need for renewable or low carbon energy in application submission and that applications for renewable or low carbon development should be approved if their impacts are (or can be made) acceptable.
- 5.2.6 Sections of the NPPF that are of particular relevance relevant to the scope of the EIA presented in Chapters 8-18 of this ES (ES Volume I **Application Document Ref. 6.2**) include:
  - 2 Achieving sustainable development;
  - 6 Building a strong, competitive economy;
  - 11 Making effective use of land;
  - 12 Achieving well designed places;
  - 14 Meeting the challenge of climate change, flooding and coastal change;
  - 15 Conserving and enhancing the natural environment; and
  - 16 Conserving and enhancing the historic environment.
- 5.2.7 On <u>30 January 202129<sup>th</sup> July 2021</u>, the Ministry of Housing, Communities & Local Government begun a consultation on draft revisions to the NPPF (MHCLG, 2020) and a new draft National Model Design Code (MHCLG, 2021). The summary of proposed amendments to the draft NPPF states that the revised Framework:
  - implements policy changes in response to the Building Better Building Beautiful Commission recommendations;
  - makes a number of changes to strengthen environmental policies including those arising from review of climate change and flood risk with Defra;
  - includes minor changes to clarify policy in order to address legal issues;
  - includes changes to remove or amend out of date material;





- includes an update to reflect a recent change made in a Written Ministerial Statement about retaining and explaining statues; and
- Clarification on the use of Article 4 directions in relation to certain permitted development rights.
- 5.2.8 The purpose of the National Model Design Code is to provide detailed guidance on the production of design codes, guides and policies to promote successful design with an implicit focus on residential and commercial development rather than NSIP. The National Model Design Code is intended to form part of the government's planning practice guidance. It is not a statement of national policy.
- 5.2.9 In light of the above, neither the draft amendments to the NPPF nor the National Design Code are is not considered to be of specific relevance to the Proposed Development.
- 5.2.10 The National Planning Practice Guidance is occasionally updated spans a range of other matters and such as air quality assessment, climate change, conserving and enhancing the historic environment, consultation and predecision matters, flood risk and coastal change, hazardous substances, light pollution, the natural environment, noise, planning obligations, renewable and low-carbon energy, Travel Plans, Transport Assessments, the use of planning conditions and waste.

### 5.3 Local Planning Policy

- 5.3.1 The Proposed Development Site lies entirely within the administrative area of NLC. The development plan for the local area currently comprises the following documents:
  - North Lincolnshire Local Development Framework Core Strategy (the 'Core Strategy') (NLC, 2011) - adopted June 2011;
  - North Lincolnshire Local Development Framework Housing and Employment Land Allocations DPD (the 'Allocations DPD') (NLC, 2016) adopted March 2016; and
  - Saved Policies of the North Lincolnshire Local Plan (the 'Local Plan') (Local Development Frameworks Government Office for Yorkshire and The Humber, 2007) adopted May 2003, saved September 2007.
- 5.3.2 It is considered that these documents may be 'important and relevant' as defined in the 2008 Act and EN-1. The local plan policies of relevance to the Proposed Development are set out in **Table 5.1** below.

**Emerging Policy** 

<u>5.3.3</u> 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).

- 5.3.3 NLC undertook their Regulation 18 'Preferred Options' consultation between February and March 2020. NLC is currently working on 'The Draft Plan', the final version of the Local Plan, prior to its submission to the Planning Inspectorate.
- 5.3.4 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) North Lincolnshire Council 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."

5.3.5 North Lincolnshire Council 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].



### Table 5.1: Local Development Plan Policies

Policy No.	Policy Document	Policy Title	Summary of Policy
Spatial Objective 1	Core Strategy	An Area Wide Renaissance	To create a step change in the area's role regionally and nationally and create a high quality of life for residents.
Spatial Objective 4	Core Strategy	Creating Greater Economic Success	To create a strong, competitive, and diverse economy by encouraging business growth and employment opportunities.
Spatial Objective 6	Core Strategy	Protecting and Enhancing the World Class Environment	To conserve and enhance world class environments, improve natural historic and built landscapes, and reducing and taking proper account of environmental impact, climate change and sea level rise.
Spatial Objective 7	Core Strategy	Efficient Use and Management of Resources	To ensure efficient use of resources, maximise recycling, minimise pollution, maintaining and improving air, soil and water quality, and employing sustainable building practices.
Spatial Objective 10	Core Strategy	Creating A Quality Environment	To transform North Lincolnshire's image through new development exhibiting a high standard of design and architectural quality that respects and enhances distinctive landscapes and townscapes.
CS1	Core Strategy	Spatial Strategy for North Lincolnshire	The spatial vision for the future development requirements will be delivered through the spatial strategy which will focus on supporting Scunthorpe's role as a major sub-regional town, supporting market towns supporting the development of key strategic employment sites at South Humber Bank, Humberside Airport and Sandtoft Airfield.



Policy No.	Policy Document	Policy Title	Summary of Policy
CS2	Core Strategy	Delivering More Sustainable Development	A sequential approach will be adopted for development, prioritising previously developed land and buildings. All future development will be required to contribute towards achieving sustainable development and comply with sustainable development principles.
CS3	Core Strategy	Development Limits	Development limits will by applied to the Scunthorpe urban area, Market Towns and Rural Settlements. Development outside these defined boundaries will be restricted to that which is essential to the functioning of the countryside.
CS5	Core Strategy	Delivering Quality Design in North Lincolnshire	All new development in North Lincolnshire should be well designed and appropriate for their context and should fulfil a number of other criteria including incorporating principles of sustainable development and incorporating appropriate landscaping and planting.
CS6	Core Strategy	Historic Environment	The Council will promote the effective management of North Lincolnshire's historic assets through safeguarding nationally significant medieval landscapes of the Isle of Axholme, preserving and enhancing rich archaeological heritage, ensuring development within Epworth safeguards the setting of buildings associated with its Methodist heritage, and ensuring development within North Lincolnshire's Market Towns safeguards their distinctive character and landscape settings.
CS11	Core Strategy	Provision and Distribution of Employment Land	The Council will support the continued expansion and improvement of North Lincolnshire's economy in order to create a step change in the areas' role regionally and nationally. Strategic employment sites will be identified in a number of broad locations but development will be supported elsewhere that meets local employment needs and maximises other special locations.
CS16	Core Strategy	North Lincolnshire's Landscape,	The Council will protect, enhance and support a diverse and multi-functional network of landscape, greenspace and waterscape through identifying a network of locally important areas, requiring developments to improve quality and quantity of accessible



Policy No.	Policy Document	Policy Title	Summary of Policy
		Greenspace and Waterscape	areas and address local deficiencies, and require the protection of trees, hedgerows and historic landscape.
CS17	Core Strategy	Biodiversity	The Council will promote effective stewardship of wildlife through a number of measures, including safeguarding national and international protected sites and ensuring development seeks to produce a net gain in biodiversity.
CS18	Core Strategy	Sustainable Resource Use and Climate Change	The Council will actively promote development that utilises natural resources as efficiently and sustainably and possible. This includes through the use of Sustainable Urban Drainage Systems, ensuring development and land use helps to protect people and the environment from unsafe, unhealthy and polluted environments, and more.
CS19	Core Strategy	Flood Risk	The Council will support development that avoids areas of current of future risk of flooding which do not increase the risk of flooding elsewhere. This will involve a risk based sequential approach to determine the suitability of land for development. In addition development will be required, wherever practicable, to incorporate SUDS to manage surface water drainage.
CS20	Core Strategy	Sustainable Waste Management	The Council will promote sustainable waste management through requiring site waste management plans for future major developments, require integration of facilities for waste minimisation re-use, recycling and composing, providing guidance on impacts arising from waste infrastructure and using planning policy to identify suitable locations for waste management.
CS25	Core Strategy	Promoting Sustainable Transport	The Council will support and promote a sustainable transport system in North Lincolnshire that offers a choice of transport modes and reduces the need to travel through spatial planning and design and by utilising a range of demand and network management tools.



Policy No.	Policy Document	Policy Title	Summary of Policy
IN10	Local Plan	Wharves	Proposals for new or extended port, wharf and jetty facilities on the Rivers Humber and Trent will be permitted provided there is no adverse impact on a number of sensitive receptors including sites of nature conservation interest and the amenity of settlements.
RD1	Local Plan	Development involving High Quality Agricultural Land	Proposals for the development or change of use of agricultural land will only be permitted where this would not result in the loss of the best and most versatile land unless it can be demonstrated that the proposed development cannot be accommodated on other forms of land.
RD2	Local Plan	Development in the Open Countryside	Development in the open countryside will be strictly controlled and permission will only be granted for certain types of development, including that which is essential for agricultural, provided a number of criteria are met.
T1	Local Plan	Location of Development	Development proposals which generate a significant volume of traffic movement, will be permitted provided that they are located in urban areas or identified for development, where there is good access to transport connections, and where there are good sustainable transport connections.
T2	Local Plan	Access to Development	All developments must provide a satisfactory access. In larger developments it should be served by a choice of transport modes, existing public transport services, additions or extensions to directly link to the development, and the existing highway network.
T5	Local Plan	Green Travel Plans	The Council will encourage business and organisations that either employ or attract a large number of visitors to draw up Green Travel Plans. Conditions and planning obligations may be sought to ensure that these are binding.
Т6	Local Plan	Pedestrian Routes and Footpaths	The safety, convenience and attractiveness of footpaths and pedestrian areas will be improved, and areas created. Major new developments will be required to include links to nearby existing or proposed pedestrian routes.



Policy No.	Policy Document	Policy Title	Summary of Policy
Т8	Local Plan	Cyclists and Development	The safety, convenience and attractiveness of cycle facilities and routes will be improved and to promote cycling as a mode of transport, priority will be given to a number of areas.
T14	Local Plan	The North Lincolnshire Strategic Road Network (NLSRN)	The Council will manage the use of roads by establishing the area's Strategic Road Network. Traffic will be concentrated onto these roads whose main purpose will be to carry traffic of more than local significance of both public and private traffic. Developments, which compromise the function of the NLSRN in traffic and safety terms, will not be permitted.
T19	Local Plan	Car Parking Provision and Standards	Provision will be made for car parking where it would meet any number of criteria, such as meeting the operational needs of a business or meeting the needs of people with disabilities, where it complies Parking Provision Guidelines.
T23	Local Plan	Water Freight	Proposals for new water freight development will be required to demonstrate that the movement of heavy goods by road is minimised by locating on deep water frontages and ensuring the transfer of bulk goods from sea to inland makes optimum use of railways, rivers, canals and pipelines/conveyor belts where appropriate.
T24	Local Plan	Road Freight	Movement and parking of HGVs will be restricted where they endanger safety, cause community severance or environmental intrusion and alternative routes exist. The environmental impact of moving freight by road will be reduced by concentrating lorries onto the Strategic Road Network, banning them from sensitive areas and encouraging the development of rail freight facilities and encouraging use of waterways.
LC1	Local Plan	Special Protection Areas, Special Areas of Conservation	Proposals for development which may effect the aforementioned sites will be assessed according to their implications for the site's conservation objectives. Proposals which are unconnected but likely to have a significant effect on the site will not be permitted unless there are no alternative solutions or imperative reasons for overriding public interest for the development. Where such development does receive, conditions or planning obligations should be used to secure compensatory measures.



Policy No.	Policy Document	Policy Title	Summary of Policy
		and Ramsar Sites	
LC2	Local Plan	Sites of Special Scientific Interest and National Nature Reserves	Proposals for development in, or likely to affect, Sites of Special Scientific Interest will be subject to special scrutiny. Where such development may have an adverse effect, directly or indirectly on the SSSI, it will not be permitted unless the reasons for the development clearly outweigh the nature conservation value of the site
LC4	Local Plan	Development Affecting Sites Of Local Nature Conservation Importance	Any development or land use change which is likely to have an adverse impact on a Local Nature Reserve, a Site of Importance for Nature Conservation or a Regionally Important Geological Site will not be approved unless it can be clearly demonstrated that there are reasons for the proposal which outweigh the need to safeguard.
LC5	Local Plan	Species Protection	Planning permission will not be granted for development or land use changes which would have an adverse impact on badgers or other protected species. Where development is permitted that may have an effect on said species conditions or planning agreements will be considered to facilitate survival, reduce disturbance and provide adequate alternative habitats.
LC6	Local Plan	Habitat Creation	Provision will be made for the creation of nature reserves and new wildlife habitats both in rural and urban areas.
LC7	Local Plan	Landscape Protection	Where development is permitted within rural settlements or within the open countryside, special attention will be given to the protection of the scenic quality and distinctive local



Policy No.	Policy Document	Policy Title	Summary of Policy	
			character of the landscape. Development which does not respect the character of the local landscape will not be permitted.	
LC12	Local Plan	Protection of Trees, Woodland and Hedgerows	Proposals for all new development will, wherever possible ensure the retention of trees, woodland and hedgerows. Particular regard will be given to the protection of these features within the setting of settlements, the protection of ancient woodlands and historic hedgerows and the amenity value of trees within built up areas.	
HE5	Local Plan	Development affecting Listed Buildings	The Council will seek to secure the preservation, restoration and continued use of buildings of special architectural or historic interest. When applications for planning permission relating to a list building is being assessed, the primary consideration will be the need to preserve the fabric and character of the building. Proposals which damage the setting of a listed building will be resisted.	
HE9	Local Plan	Archaeological Evaluation	Where development proposals affect sites of known or suspected archaeological importance, an archaeological assessment to be submitted prior to the determination of a planning application will be required. Sites of known archaeological importance will be protected.	
DS1	Local Plan	General Requirements	A high standard of design is expected in all developments in both built-up areas and the countryside and proposals for poorly designed development will be refused. All proposals will be considered against criteria relating to quality of design, amenity, conservation, resources, and utility and services.	
DS7	Local Plan	Contaminated Land	In the case of proposals for development on land known or strongly suspected as being contaminated, applicants will be required to demonstrate that the level of contamination can be overcome by remedial measures or improvements.	
DS10	Local Plan	New Hazardous	Permission for development involving the storage of materials or carrying out of processes with hazardous materials will only be granted where demonstrated the proposals will impose no specific development restrictions on surrounding land users,	



Policy No.	Policy Document	Policy Title	Summary of Policy	
		Installations and Pipelines	will not put at risk surrounding residential properties, or prove a risk to other premises in the locality where significant numbers of people regularly congregate.	
DS11	Local Plan	Polluting Activities	Permission for development will only be demonstrated where it can be demonstrated the level of potentially polluting emissions do not pose a danger, result in contamination, pose a threat to water resources or crate adverse environmental conditions.	
DS12	Local Plan	Light Pollution	Applications involving light generating development including floodlighting will only be permitted where it can be demonstrated that there would be no adverse impact on local amenities.	
DS13	Local Plan	Groundwater Protection and Land Drainage	All development proposals must take account of the need to secure effective land drainage measures and ground water protection in order to control the level of water in the land drainage system.	
DS14	Local Plan	Foul Sewage and Surface Water Drainage	The Council will require satisfactory provision to be made for the disposal of foul and surface water from new development, either by agreeing details before planning permission is granted, or by imposing conditions on a planning permission or completing planning agreements to achieve the same outcome.	
DS15	Local Plan	Water Resources	Development will not be permitted which would adversely affect water resources or nature conservation, fishers and amenity by means of pollution and abstraction unless adequate measures are undertaken to reduce the impact to an acceptable level.	
DS16	Local Plan	Flood Risk	Development will not be permitted within floodplains, unless adequate protection or mitigation measures are undertaken, where it would it would cause harm, such as increasing the number of people or buildings at risk or undermining the integrity of existing flood defences.	
DS17	Local Plan	Overhead Power Lines and High-	The Council will seek to minimise the environmental effects of proposals for overhead power lines of 132kv or over, and high-powered electrical installations. The Council will	



Policy No.	Policy Document	Policy Title	Summary of Policy	
		Powered Electrical Installations	not support such development within or in locations where the development would have a detrimental impact upon certain sensitive areas.	



# 6.0 THE ASSESSMENT OF THE PROPOSED DEVELOPMENT AGAINST POLICY

## 6.1 Introduction

- 6.1.1 This section provides an assessment of the Proposed Development against policy, given that **Section 104** of the 2008 Act requires the SoS to determine applications for NSIPs in accordance with the relevant NPSs and MPSs.
- 6.1.2 The assessment of the Proposed Development against the NPSs has been structured so as to follow the relevant 'assessment principle' and 'generic impact' headings set out in EN-1 and also to take account of the 'assessment and technology specific considerations' contained within EN-2, EN-4 and EN-5 in relation to fossil fuel generating stations and electricity transmission and gas infrastructure, where these are not covered by the assessment principles and generic impacts of EN-1. Each heading references the relevant part or section of the NPSs.
- 6.1.3 An assessment of the conformity of the Proposed Development with NPS EN-1, NPS EN-2, NPS EN-4, NPS EN-5, the UK MPS, and the East Inshore Marine Plan, is provided in sections 6.2-6.5 below while sections 6.6-6.7 consider relevant policies contained within the NPPF and the local plan that could constitute important and relevant considerations in decision making.
- 6.1.36.1.4 This version (VP2.0) of the Planning Statement includes an assessment of the Proposed Development against the draft policy in the consultation version of NPS EN-1 to EN-5. These do not constitute the relevant 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).

#### 6.2 National Policy Statements: Assessment Principles

#### Assessment Principles

- 6.2.1 Part 4 of EN-1 sets out 'General points' that the SoS should take into account in decision-making on NSIPs, in addition to a number of key assessment principles that both applicants and the SoS should have regard to in preparing and determining applications for development consent.
- 6.2.2 The majority of the assessment principles in EN-1 are of relevance to most types of nationally significant energy infrastructure. A number of these are also referred to within EN-2, EN-4 and EN-5 in relation to the types of technology that are covered by them in 'assessment and technology-specific information' and are therefore also dealt with below and the relevant part of the NPS is referenced.





General Points (EN-1, 4.1)

- 6.2.3 EN-1 'General points' (paragraph 4.1.2) reiterates the urgency of the 'need' for the types of infrastructure covered by the energy NPSs and again confirms that the SoS should start with a presumption in favour granting development consent for energy NSIPs.
- 6.2.4 Paragraph 4.1.3 goes on to state that in considering applications for energy NSIPs, and in particular, when weighing their adverse impacts against their benefits, the SoS should consider:
  - the potential benefits including the contribution to meeting the need for energy infrastructure, job creation and any long-term or wider benefits; and
  - the potential adverse impacts, including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts.
- 6.2.5 Paragraph 4.1.4 goes on to state that in this context, the SoS should take into account environmental, social and economic benefits and adverse impacts, at national, regional and local levels.
- 6.2.6 With regard to this, this Planning Statement at **Section 7** provides an assessment of the key benefits and adverse impacts of the Proposed Development. It shows that the Proposed Development would have a number of substantial benefits and that these clearly outweigh its adverse impacts.
- 6.2.7 Paragraph 4.1.5 confirms that matters that the SoS may consider both "important and relevant" to decision making on energy NSIPs may include local development plan documents. However, in the event of a conflict between these or any other documents and an NPS, the NPS prevails. It is also relevant to note that the Government energy and climate change policy is important and relevant to the decision-making on the Proposed Development.
- 6.2.8 In respect of the above, this section of the Planning Statement provides an assessment of the compliance of the Proposed Development with local planning policy. This demonstrates that the Proposed Development does not conflict with local policy. Government energy and climate change policy, and how the Proposed Development would contribute toward key policy objectives is considered at **Section 4** of this Planning Statement.
- 6.2.9 Paragraph 4.1.7 confirms that the SoS should only impose 'requirements' in relation to a development consent where these satisfy relevant guidance and are necessary, relevant to planning, relevant to the development to be consented, enforceable, precise and reasonable in all other respects.
- 6.2.10 The Applicant has included a number of requirements within the draft DCO (Application Document Ref. 2.1) that, amongst other matters, are intended to control the detailed design of the Proposed Development in addition to its construction and operation in order to ensure that it accords with the EIA carried





out and does not result in unacceptable impacts. In preparing the draft requirements the Applicant has had regard to other relevant DCOs and relevant guidance; notably that contained within the NPPF (paragraphs 203-206), the PPG ('Use of planning conditions') and the Planning Inspectorate's Advice Note 15 'Drafting Development Consent Orders'. The requirements are contained at Schedule 2 of the draft DCO and their intended purpose is explained within the Explanatory Memorandum (**Application Document Ref. 2.2**).

- 6.2.11 Paragraph 4.1.8 states that SoS may take into account any development consent obligations (under Section 106 of the TCPA 1990 as amended by Section 174 of the Act) that an applicant agrees with local authorities. To be required development consent obligations must satisfy broadly similar tests to requirements; they must be relevant to planning, necessary to make the development acceptable in planning terms, directly related to the development, fairly and reasonably related in scale and kind to the development and reasonable in all other respects (NPPF paragraphs 203-206 and the PPG 'Planning obligations').
- 6.2.12 The Applicant's assessment of the Proposed Development, notably through the EIA, has identified some effects that require mitigation. However, the necessary mitigation has either been embedded within the design of the Proposed Development or would be secured through the proposed requirements and therefore, taking into account the above tests, there is no other mitigation that would warrant a development consent obligation in order to make the Proposed Development acceptable in planning terms. The Schedule of Commitments (ES Volume II Appendix 20A Application Document Ref. 6.3.34) confirms how the mitigation and commitments set out in the ES will be secured.
- 6.2.13 Paragraph 4.1.9 confirms that in bringing forward energy infrastructure, the applicant will have made a judgement as to its financial and technical feasibility. It goes on to state that where the SoS considers, based on the information provided in the application, that financial and technical feasibility have been properly assessed, they are unlikely to be relevant to the SoS's decision-making.
- 6.2.14 With regard to the above, the Applicant has made a decision to proceed with the Application based on a number of commercial and financial considerations. Paragraph 3.3.6 of EN-1 states that "...it is for industry to propose the specific types of development that they assess to be viable..." within the framework established by the Government. The Applicant has a strong track record of bringing forward energy infrastructure across the UK, including Keadby 2 and Keadby Wind Farm, and the Funding Statement (Application Document Ref. 3.3) confirms that the Applicants are able to find any compulsory acquisition that is required to deliver the Proposed Development.





- 6.2.15 The emerging Draft EN-1 policy is similar to the current however, provides additional guidance as to how the Secretary of State will assess the proposed development.
- 6.2.146.2.16 Section 4.1.2 of the emerging Draft EN-1 Policy provides additional guidance on the influence of draft Development plans when reaching a decision on the proposed development. The Draft EN-1 Policy states, "Where the project conflicts with a proposal in a draft Development Plan, the Secretary of State should take account of the stage which the Development Plan document in England or Local Development Plan in Wales has reached in deciding what weight to give to the plan for the purposes of determining the planning significance of what is replaced, prevented or precluded. The closer the Development Plan document in England or local Development in England or local Development for the purposes of determining the planning significance of what is replaced, prevented or precluded. The closer the Development Plan document in England or local Development Plan in Wales is to being adopted by the LPA, the greater weight which can be attached to it".

Environmental Statement (EN-1, 4.2)

- 6.2.156.2.17 EN-1 (paragraph 4.2.1) states that proposed developments that are subject to the European EIA Directive (to be read now as referring to the EIA Regulations) must be accompanied by an ES describing the aspects of the environment likely to be significantly affected by the Proposed Development. It highlights that the European EIA Directive specifically refers to effects on human beings, fauna, flora, soil, water, air, climate, the landscape, material assets and cultural heritage and the interaction between them. It goes on to state that the assessment of effects in the ES should cover direct and indirect effects, both permanent and temporary, cumulative effects, positive and negative effects and measures for avoiding or mitigating significant adverse effects.
- 6.2.166.2.18 Paragraphs 4.2.2 4.2.11 provide further guidance on the matters that should be covered within the ES for the purposes of SoS decision making.
- 6.2.176.2.19 The Application includes an ES (Application Document Ref. 6.1 6.3). In advance of preparing the ES, the Applicant obtained a 'Scoping Opinion' from PINS, which is provided as ES Volume III Appendix 1B (Application Document Ref. 6.3.2). The scope and coverage of the ES accords with the Scoping Opinion and ES Volume I Chapter 2: Assessment Methodology (Application Document Ref. 6.2.2) sets out how the EIA has taken into account the Scoping Opinion and the technical scope of the EIA that has been undertaken.
- 6.2.186.2.20 As required by EN-1, the ES for the Proposed Development includes the following:
  - An assessment of the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects for all stages of the Proposed Development, and also the measures envisaged for avoiding and mitigating any significant adverse





effects. The approach taken to the assessment of environmental effects is set out at ES Volume I Chapter 2 'Assessment Methodology'. Furthermore, ES Volume I, Chapters 8 - 18 identify the likely significant effects of the Proposed Development, the mitigation measures (where required) and the residual effects. The ES, in the assessment of effects, therefore, clearly distinguishes between the different stages of the Proposed Development.

- An explanation of the components of the Proposed Development where it has not been possible to fix details in advance of the submission of the Application and where flexibility is required, and the approach that has been taken to assessing the effects that may result. In this respect, the Applicant has adopted the principles of the 'Rochdale Envelope' and has assessed through the EIA maximum 'worst case' dimensions and design parameters. Where this approach has been applied it is explained in each relevant chapter of ES Volume I. The approach that has been taken is explained at ES Volume I, Chapter 4: The Proposed Development. The maximum dimensions and parameters would be controlled and secured through Requirement 5 'Detailed design' at Schedule 2 of the draft DCO (**Application Document Ref. 2.1**). The maximum extent of the Proposed Development is defined by the limits of deviation on the Works Plans (Application Document Ref 4.3) and the elevations, sections and levels on the indicative drawings (Application Document Refs 4.7 - 4.15) and Table 4.2 of the Design and Access Statement (Application Document Reference: 5.6).
- Information on the likely significant social and economic effects of the Proposed Development is provided at ES Volume I, Chapter 16: Socio-Economics (Application Document Ref. 6.2.16). This includes the benefits of the Proposed Development in terms of employment generation both through direct employment and wider benefits for the economy. Overall, there are predicted to be significant positive benefits in socioeconomic terms. Mitigation measures are also set out.
- 6.2.196.2.21 ES Volume I, Chapter 19: Cumulative and Combined Effects (Application Document Ref. 6.2.19) considers how the effects of the Proposed Development could combine and interact with the effects of other planned and consented Proposed Developments, including those already in existence. The approach to assessing cumulative effects is set out in ES Volume I, Chapter 2: Assessment Methodology (Application Document Ref. 6.2.2).
- 6.2.206.2.22 The significant effects of the Proposed Development, along with the mitigation measures that would be applied to reduce the significance and magnitude of those effects, where required, are summarised in ES Volume I, Chapter 20: Summary of Likely Significant Residual Effects (Application Document Ref. 6.2.20). ES Volume II Appendix 20A: Schedule of Commitments (Application Document Ref. 6.3.34) sets out how that mitigation will be secured.





- <u>6.2.23</u>As indicated above, the draft DCO at Schedule 2 includes appropriate requirements to control and secure the details of the Proposed Development that are still to be finalised to ensure that it will be constructed in accordance with the EIA that has been undertaken.
- 6.2.216.2.24 The emerging Draft EN-1 states that all proposals are now subject to the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) replacing the previous adherence to European EIA Directive. These Regulations more specifically refer to effects on population, human health, biodiversity, land, soil, water, air, climate, the landscape, material assets and cultural heritage, and the interaction between them. However, the conclusions above are unaffected by this change as the Environmental Statement submitted as part of this application adheres to the guidance laid out in the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations).

Habitats Regulations (NPS EN-1, 4.3)

- 6.2.22 EN-1 (paragraph 4.3.1) confirms that prior to granting development consent, the SoS must, under the Habitats Regulations, consider whether the Proposed Development may have a significant effect on a European site, or any site to which the same protection is applied as a matter of policy, either alone or in combination with other plans and Proposed Developments. EN-1 continues that the applicant should seek the advice of Natural England ('NE') and provide the SoS with such information as may be reasonably required to determine whether an 'Appropriate Assessment' is required.
- 6.2.23 In their response to the Section 42 Consultation, Natural England provided a list of designated sites relevant to the application and within 15km of the Proposed Development Site which required assessment for potential operational air quality impacts. The impacts on these designated sites were considered in the Habitat Regulations Assessment Screening Report (Application Document Ref. 5.12).
- 6.2.26 The emerging Draft EN-1 states in 4.2.10 that if during the pre-application stage the Statutory Nature Conservation Body (SNCB) indicate the proposed development is likely to adversely affect the integrity of HRA sites, the applicant must include such information in their application and may be required to assess a potential derogation under the Habitats Regulations. Accordingly, as the Keabdby 3 Low Carbon Gas Power Station has passed the pre-application stage, the guidance is not relevant and the conclusions stated above are unaffected.

Alternatives (NPS EN-1, 4.4)

6.2.246.2.27 Paragraph 4.4.1 confirms that as in any planning case, the relevance or otherwise to the decision-making process of the existence (or alleged existence) of alternatives to a Proposed Development is in the first instance a





matter of law, which falls outside the scope of the NPS. It goes on, however, to state that from a policy perspective there is no general requirement to consider alternatives or to establish whether a Proposed Development represents the best option, except that:

- Applicants are obliged to include in their ES, as a matter of fact, information about the main alternatives they have studied. This should include an indication of the main reasons for the applicant's choice, taking into account the environmental, social and economic effects and including, where relevant, technical and commercial feasibility.
- In some cases, there are specific legislative requirements, notably under the Habitats Directive, for the SoS to consider alternatives. These should be identified in the ES by the applicant.
- In some circumstances, the relevant energy NPSs may impose a policy requirement to consider alternatives; EN-1 does in Sections 5.3, 5.7 and 5.9 in relation to avoiding significant harm to biodiversity and geological conservation interests, flood risk and development within nationally designated landscapes, respectively.
- 6.2.256.2.28 Information relating to the main alternatives that the Applicant has considered in relation to the Proposed Development are set out at ES Volume I Chapter 6 (Consideration of Alternatives) (**Application Document Ref. 6.2.6**). This includes the alternatives considered in terms of the Site, technologies and fuels, design options and design evolution, and layouts and temporary construction laydown areas.
- 6.2.266.2.29 With regard to the policy requirements of EN-1 to consider alternatives in some circumstances, paragraph 5.3.7 states that as a general principle, development should aim to avoid significant harm to biodiversity and geological conversation interests, including through mitigation and consideration of reasonable alternatives; where significant harm cannot be avoided, then appropriate compensation measures should be sought.
- 6.2.276.2.30 It is considered that the assessment of alternatives in relation to biodiversity and geological conservation interests is of more relevance where development has the potential to impact upon European or international sites or national designations.
- 6.2.286.2.31 There are no geological interest features either within the vicinity of or at the Site and this has been confirmed by ES Volume I Chapter 13 (Geology, Hydrogeology and Land Contamination) (**Application Document Ref. 6.2.13**).
- 6.2.296.2.32 Paragraph 5.7.13 of EN-1 states that the consideration of alternative sites is relevant to the application of the 'Sequential Test' in relation to flood risk, with the preference in the first instance to locate development within Flood Zone 1, the zone of least probability of tidal or fluvial flooding.





- 6.2.306.2.33 The Environment Agency's 'Flood Map for Planning' (Environment Agency, 2020c) identifies that the majority of the Proposed Development Site and surrounding environs are located within Flood Zone 3, with the exception of a small section of the Proposed Development Site within the New Permanent Access from A18, which is in Flood Zone 2. Despite this, it is acceptable in principle for 'Essential Infrastructure' (which includes utility infrastructure that has to be located in flood risk zones for operational reasons - e.g. generating stations that need to be close to a supply of water for cooling) to be located in such zones, provided they are designed and constructed to be able to operate during times of flood, satisfy the 'Exception Test' (i.e. have wider sustainability benefits to the community that outweigh the flood risk) and will be safe from the risk of flooding. The location comprises largely previously developed land and the Proposed Development provides extensive wider sustainability benefits due to its role in providing high amounts of low carbon electricity generation consistent with the urgent need identified in NPS EN-1 paragraph 3.3.15 and which is corroborated by recent policy in the EWP and recent official evidence from the CCC and NIC. The Proposed Development therefore satisfies the Exception Test, with ES Volume I Chapter 12, (Water Environment and Flood Risk) (Application Document Ref. 6.2.12) and ES Volume II Appendix 12A: Flood Risk Assessment (Application Document Ref. 6.3.20) demonstrating that it would be safe and not result in significant effects in terms of flooding. The EA has reviewed the Flood Risk Assessment undertaken by the Applicant at various stages pre application.
- 6.2.316.2.34 Paragraph 5.9.10 of EN-1 indicates that the consideration of alternatives can also be relevant where development involves land that is subject to national landscape designations, such as National Parks or Areas of Outstanding Natural Beauty.
- 6.2.326.2.35 ES Volume I Chapter 14 'Landscape and Visual' (Application Document Ref. 6.2.14) (Application Document Ref. 6.2.14) confirms that the Study Area is located within two National Character Areas (NCAs). The Proposed Development Site and the majority of the Study Area falls within NCA 39: Humberland Levels. The east of the Study Area falls within NCA 45 Northern Lincolnshire Edge with Coversands.
- <u>6.2.36</u> The Applicant's consideration of alternatives in relation to the Proposed Development, as set out in the ES, is therefore considered to be both appropriate and proportionate.
- 6.2.336.2.37 The emerging Draft EN-1 adds that when considering alternatives "only alternatives that can meet the objectives of the proposed development need be considered". The conclusions of ES Volume I Chapter 6 (Consideration of Alternatives) (Application Document Ref. 6.2.6) are considered to remain unaffected as only such alternatives were included. The above conclusions are therefore unaffected.





Criteria for "good design" in energy infrastructure (NPS EN-1, 4.5; EN-2, 2.3.15-2.3.16; EN-4, 2.3 and EN-5, 2.5)

- 6.2.346.2.38 EN-1 (paragraph 4.5.1) recognises that the functionality of buildings and infrastructure, including fitness for purpose and sustainability, are as equally important as visual appearance and aesthetic considerations. It goes on to state that applying 'good design' to energy Proposed Developments should produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction and operation, matched by an appearance that demonstrates 'good aesthetic' as far as possible. It is however acknowledged that "...the nature of much energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of an area."
- 6.2.356.2.39 Paragraph 4.5.2 of EN-1 notes that 'good design' is also a means by which many policy objectives in the NPS can be met, for example, the impact sections (of EN-1) show how good design, in terms of siting and use of appropriate technologies can help mitigate adverse impacts such as noise.
- 6.2.366.2.40 Paragraph 4.5.3 confirms that in assessing applications, the SoS will need to be satisfied that energy infrastructure developments are sustainable and, having regard to regulatory and other constraints, are as attractive, durable and adaptable (including taking account of natural hazards such as flooding) as they can be. In doing so, it goes on to state that the SoS should be satisfied that:

"...the applicant has taken into account both functionality (including fitness for purpose and sustainability) and aesthetics (including its contribution to the quality of the area in which it would be located) as far as possible. Whilst the applicant may not have any or very limited choice in the physical appearance of some energy infrastructure, there may be opportunities for the applicant to demonstrate good design in terms of siting relative to existing landscape character, landform and vegetation. Furthermore, the design and sensitive use of materials in any associated development such as electricity substations will assist in ensuring that such development contributes to the quality of the area."

- 6.2.376.2.41 Paragraph 4.5.4 stresses the importance of applicants being able to demonstrate in their application documents how the design process was conducted and how the proposed design evolved. However, it also makes clear that in considering applications, the SoS should take into account the ultimate purpose of the infrastructure and bear in mind the operational, safety and security requirements, which the design has to satisfy.
- 6.2.386.2.42 EN-2 (paragraph 2.3.16) states that in relation to fossil fuel generating stations, applicants should demonstrate good design particularly in respect of landscape and visual amenity and in the design of the Proposed Development to mitigate impacts such as noise and vibration, transport impacts and air emissions.





- 6.2.396.2.43 EN-4 (paragraph 2.3.1) states that in relation to gas infrastructure, applicants should demonstrate good design as per section 4.5 of EN-1.
- 6.2.406.2.44 EN-5 (paragraph 2.5.2) states that proposals for electricity network infrastructure should demonstrate good design in their approach to mitigating the potential adverse impacts that can be associated with overhead lines.
- 6.2.416.2.45 The Design and Access Statement ('DAS') (Application Document Ref. 5.6) provides an explanation of how the design of the Proposed Development has evolved in the lead up to the submission of the Application. It sets out how the Applicants has demonstrated 'good design' in respect of the Proposed Development. It describes how account has been taken of the Site's context and the design process that has been followed, including the broad approach that has been taken to the design of the Proposed Development and how this has changed and evolved throughout the pre-application process taking account of relevant design, technical and other factors.
- 6.2.426.2.46 Furthermore, the individual chapters of the ES explain how the Proposed Development has been designed, including the mitigation embedded in its design, to minimise and mitigate impacts. ES Volume II Appendix 20A: Schedule of Commitments (**Application Document Ref. 6.3.34**) sets out how such mitigation will be secured.
- 6.2.436.2.47 The immediate context for much of the Site is formed and dominated by the extensive industrial complex of the Keadby Power Station Site, which contains the two gas fired power stations Keadby 1 and Keadby 2, along with their respective infrastructure. The immediate context has therefore been significantly altered by human activity and development and is not therefore sensitive to change.
- 6.2.446.2.48 The PCC part of the Site is located at Keadby Common to the north of the Keadby Power Station Site and comprises flat, former agricultural land previously in arable production until circa 2017/2018. The northern areas of Keadby Common where the CCGT and CCP are proposed (referred to as the 'Main Site') are occupied by improved grassland.
- 6.2.456.2.49 To the east and south east of the PCC lies the wider Keadby Power Station Site, including a 400k V National Grid Substation, sizeable hardstanding areas, such as a temporary contractor compound currently in use for the Keadby 2 construction, gas compound, internal site roads, car parking, security fencing and further associated on-site electrical infrastructure such as pylons and substations. As a result, the wider area surrounding the site is not particularly sensitive to change.
- 6.2.466.2.50 The final design of the Proposed Development, notably the PCC Site, is functional, reflecting its purpose and the context within which it will sit. In terms of siting and layout, the main buildings and structures are set well within the plot and have been grouped together where feasible from a technical and safety perspective to consolidate the built form.





- 6.2.476.2.51 The perimeter areas of the PCC Site will be landscaped and there will be opportunities for planting and biodiversity enhancement. A Biodiversity and Landscape Strategy will be secured through Requirement 6 ('Landscaping and biodiversity protection management and enhancement') of Schedule 2 of the draft DCO (**Application Document Ref. 2.1**). This document will set out the principles of habitat mitigation, management and enhancement and landscape design that will be adopted in the detailed design process, as well as the areas of the Site retained for landscaping purposes.
- 6.2.486.2.52 Permanent access to the Proposed Development Site during operation would be via the existing road access road from the A18 which passes via the existing North Pilfrey Bridge over the Stainforth and Keadby Canal and the Scunthorpe to Doncaster passenger rail line. Vehicles would access the Proposed Development Site from the A18, via this existing access road/ Bonnyhale Road/ existing private access roads and a new main access road to be constructed into the Proposed PCC Site. The route was previously used for the construction of the Keadby Wind Farm and most recently for construction movements associated with Keadby 2.
- 6.2.496.2.53 As part of the Proposed Development, **Work No. 8** comprises of maintenance and improvement of this existing private access road from the junction with the A18, including A18 Junction Improvement, replacement of private bridge (Mabey Bridge); installation of layby and gatehouse.
- 6.2.506.2.54 EN-4 (Paragraphs 2.19.7 2.19.10) explores factors influencing site selection by applicants for gas pipelines. It includes researching constraints such as residential properties, railway crossings, major road crossings, main river and watercourse crossings as well as underground cavities from mine workings and other utilities services which may have an effect on the integrity and safety of the pipeline. It also states applicants should seek to avoid or minimise adverse effects from usage below the surface.
- 6.2.516.2.55 EN-5 (Section 2.2) contains information on factors influencing site selection for electricity networks infrastructure. It states that the general location of electricity network projects is often determined by the location, or anticipated location, of a particular generating station and it must also have regard to preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, history or archaeological interest and reasonably mitigate any effect on the proposals.
- 6.2.526.2.56 The gas pipeline connection (Work No. 2) avoids complex crossing and is only approximately 300m (potentially up to 400m) in length, and therefore has very limited impacts. Similarly the electrical cable connection (Work No. 3A) to the existing National Grid 400kV substation adjacent to Work No. 1 is very limited in its scale and impacts.





- <u>6.2.57</u> It is therefore considered that the Proposed Development represents 'good design' for the purposes of energy infrastructure and policy set out EN-1, EN-2, EN-4 and EN-5. It should also be noted that details of the external appearance of the Proposed Development will need to be approved by the relevant planning authority under Requirement 5 'Detailed design' of Schedule 2 of the draft DCO (**Application Document Ref. 2.1**).
- 6.2.536.2.58 The emerging Draft EN-1 draws attention to wider impacts such as landscape and environmental impact being important factors in the design process. It also states assessment of impacts must be for the entirety of the stated design life. It is considered that the design process for the Proposed Development took account of landscape and environmental factors and assessed any impacts across the entirety of the stated design life. The emerging Draft EN-5 puts a greater focus on safety and security over aesthetic appearance in the design of electricity networks infrastructure. The above conclusions are therefore unaffected.

Consideration of combined heat and power ('CHP') (NPS EN-1, 4.6; and EN-2, 2.3.2-2.33)

- 6.2.546.2.59 EN-1 (paragraph 4.6.1) confirms that CHP is the generation of useable heat and electricity in a single process. A CHP station may either supply steam direct to customers or capture waste heat for low-pressure steam, hot water or space heating purposes after it has been used to drive electricity generating turbines. The heat can also be used to drive absorption chillers, thereby providing cooling.
- 6.2.556.2.60 Paragraph 4.6.2 goes on to state that CHP is technically feasible for all types of thermal generating stations. To be economically viable (paragraph 4.6.5) as a CHP plant, a generating station needs to be located close to industrial or domestic customers with heat demands. The distance will vary according to the size of the generating station and the nature of the heat demand. The provision of CHP is most likely to be cost-effective and practical where it is included as part of the initial design and is part of a mixed-use development.
- 6.2.566.2.61 Paragraph 4.6.6 of EN-1 states that "...under Guidelines issued by DECC (then DTI) in 2006 [the Combined Heat and Power (CHP) Guidance], any application to develop a thermal generating station under Section 36 of the Electricity Act 1989 must either include CHP or contain evidence that the possibilities for CHP have been fully explored to inform the [Secretary of State]'s consideration of the application," and that the, "...same principle applies to any thermal power station which is subject to an application for development consent under the Planning Act 2008." It continues that the SoS should have regard to DECC's guidance or any successor to it when considering the CHP aspects of applications for thermal generating stations. Since the publication of the DECC Guidance, in 2013 the Environment Agency ('EA') has published its own 'CHP Ready Guidance for Combustion and Energy from Waste Plants'.





- 6.2.576.2.62 Where CHP is not feasible, paragraphs 4.6.8 and 4.6.9 emphasise the need for applicants to demonstrate how the design of the development provides for the future provision of CHP (i.e. that it is 'CHP Ready').
- 6.2.586.2.63 EN-2 (paragraphs 2.3.2 2.3.3) reiterates the requirement of EN-1 for applications for generating stations to either include CHP or present evidence in the application that the possibilities for CHP have been fully explored.
- 6.2.64 The Applicant has assessed the feasibility of CHP in accordance with EN-1, EN-2 the EA's guidance. This assessment is reported within the 'Combined Heat and Power Assessment' (Document Reference: 5.7). Requirement 32 'Combined Heat and Power' of Schedule 2 of the draft DCO (Application Document Ref. 2.1) requires that this be periodically reviewed.
- 6.2.596.2.65 The emerging Draft EN-1 adds that "if an application does not demonstrate that CHP has been considered the Secretary of State should seek further information from the applicant. The Secretary of State should not give development consent unless satisfied that the applicant has provided appropriate evidence that CHP is included or that the opportunities for CHP have been fully explored." As mentioned above, the Applicant has carried out a Combined Heat and Power Assessment which is to be periodically reviewed as per the draft DCO. The above conclusions are therefore unaffected.

Carbon Capture Readiness ('CCR') (NPS EN-1, 4.7 and NPS EN-2, 2.3)

- 6.2.606.2.66 Paragraph 4.7.10 pf EN-1 states that to ensure that no foreseeable barriers exist to retrofitting carbon capture and storage ('CCS') equipment on combustion generating stations, all applications for new combustion plant which are of generating capacity at or over 300 MW should demonstrate that the plant is CCR before consent may be given. Furthermore, that in order to provide assurance that a proposed development is CCR, applicants will need to demonstrate that their proposal complies with the following:
  - that sufficient space is available on or near the site to accommodate carbon capture equipment in the future;
  - the technical feasibility of retrofitting their chosen carbon capture technology;
  - that a suitable area of deep geological storage offshore exists for the storage of captured CO2 from the proposed combustion station;
  - the technical feasibility of transporting the captured CO2 to the proposed storage area; and
  - the economic feasibility within the combustion station's lifetime of the full CCS chain, covering retrofitting, transport and storage.
- 6.2.616.2.67 NPS EN-2 at paragraph 2.3.6 goes on to say that the SoS should impose requirements on any consent, requiring operators to retain control over





sufficient additional space (whether on or near the site) for the carbon capture equipment; retain their ability to build carbon capture equipment on this space (whether on or near the site) in the future; and submit update reports on the technical aspects of its CCR status to the SoS at defined intervals following the first supply of electricity to the grid until such time that the plant moves to retrofit CCS.

- 6.2.626.2.68 The Proposed Development is a carbon capture enabled electricity generating station fuelled by natural gas, which in line with public statements by SSE<sup>1</sup> is to be equipped with first of a kind carbon capture capture and compression equipment from the outset on its full generating capacity, and will connect into a major CCUS network, Zero Carbon Humber.
- 6.2.636.2.69 The relationship with the wider CCUS network is shown in Table 6.1 below.

Table 6.1: Consenting arrangements for the deployment of the CCUS	
chain	

Element	Developer	Within the scope of the DCO Application?
Electricity generating station Equipped with post- combustion carbon capture plant, along with CO <sub>2</sub> compression facilities, and cooling water, gas, and electricity grid connections)	The Applicant	Yes (comprised in Work Nos. 1-7A and 8-11). In addition, requirements are proposed within the draft DCO ( <b>Application Document Ref.</b> <b>2.1</b> ) that would ensure the electricity generating station being brought into commercial use, following commissioning, without the post- combustion carbon capture plant and CO <sub>2</sub> compression facilities also bring brought into commercial use.
Above ground CO <sub>2</sub> installation For the export of compressed	National Grid Carbon	Yes (works are comprised in <b>Work No. 7B</b> , and article 6 of the Draft DCO, <b>Application</b> <b>Document Ref. 2.1</b> , provides National Grid Carbon with the benefit of the provisions of the DCO in relation to <b>Work No. 7B</b> ). In addition, controls are proposed within the draft DCO

<sup>&</sup>lt;sup>1</sup> "The focus must be on a making sure any new gas power station built today has a clear low carbon pathway. Both gas-fired power generation with carbon capture and storage (CCS) and hydrogen power generation have roles to play in meeting net zero cost-effectively while providing firm, flexible capacity – and need to be deployed at scale internationally" (SSE 2020a, p12)





Element	Developer		Within the scope of the DCO Application?
CO <sub>2</sub> from the electricity generating station to the CO <sub>2</sub> gathering network			(Application Document Ref. 2.1) to prevent the electricity generating station (Work No. 1A) being brought into commercial use without the above ground CO <sub>2</sub> installation (Work No. 7A) also bring brought into commercial use.
CO <sub>2</sub> gathering network Including onshore CO <sub>2</sub> export pipeline(s) connecting to power and industry, and compression facilities for export to offshore geological storage	National Carbon other Partnership member companies	Grid and ZCH	No (comprised in the Humber Low Carbon Pipelines Project DCO <sup>2</sup> ). Controls are proposed within the draft DCO ( <b>Application Document Ref. 2.1</b> ) to prevent the electricity generating station being constructed before relevant consents are in place for CO <sub>2</sub> gathering network.
Offshore storage Including offshore pipeline(s) connecting the CO <sub>2</sub> gathering network to the offshore geological storage site	The Nort Endurance Partnership (NEP) member companies	hern and	No (comprised in the NEP Offshore Consent) Controls are proposed within the draft DCO ( <b>Application Document Ref. 2.1</b> ) to prevent the electricity generating station being constructed before a CO <sub>2</sub> storage licence is in place for the geological storage site.

6.2.646.2.70 As can be seen from Table 6.1 above, requirements have been incorporated into the Draft DCO in order to ensure that the generating station is constructed only once the development of the wider CCUS network is derisked, namely, by the granting of development consent in place for the wider



<sup>&</sup>lt;sup>2</sup> https://infrastructure.planninginspectorate.gov.uk/projects/yorkshire-and-the-humber/humber-low-carbon-pipelines/



carbon dioxide gathering network and a storage licence for the intended geological storage site.

- 6.2.656.2.71 In addition (and beyond the remit of planning and consenting) the Applicant will only construct the Proposed Development once it has made a positive financial investment decision, which will take into account commercial considerations, the wider policy support in place from government, and other factors separate from the development consent process. NPS EN-1 explains that the Government's established view is that the development of new energy infrastructure is market-based, and it remains a matter for the market to decide where and how to build, responding to incentives, rules and policy set by government. In particular, NPS EN-1 states "Against this background of possibly changing market structures, developers will still need development consent for each proposal"
- 6.2.666.2.72 The DCO Application includes a 'Carbon Capture Statement' (Document Ref. 5.8) to demonstrate that it is technically feasible to incorporate carbon capture technology within the Proposed Development and that it is 'Carbon Capture Ready' ('CCR') in accordance with 'The Carbon Capture Readiness (Electricity Generating Stations) Regulations 2013'. The CCR Assessment has been produced in accordance with the requirements of the Department of Energy and Climate Change guidance 'Carbon Capture Readiness (CCR) – A Guidance Note for Section 36 Electricity Act 1989 consent applications' (November 2009) notwithstanding that the Energy White Paper explains that government will consult in 2021 over proposals to update CCR requirements to reflect technological advances and apply them more broadly, by removing the 300MW threshold (HM Government, 2020a, p48). Requirements in Schedule 2 of the Draft DCO also stipulate the retention of sufficient additional space on the Proposed Development Site for the carbon capture equipment and not to dispose of it before building the carbon capture plant (Works 1C and 7), as required by NPS EN-2 2.3.6.
- 6.2.676.2.73 It should be recognised that natural gas has considerably lower carbon emissions, and other emissions to air, for a given power output than a coal fired power station and therefore the policy in NPS EN-2 at paragraph 2.3.7 setting criteria around CCS for coal-fired generating stations is not of relevance. This relates to the established regulatory requirement that coal-fired generating stations are constructed with a full CCS chain fitted on at least 300MW of their generating capacity. Applicants for coal-fired generating stations must provide evidence in their DCO application to show technically feasible plans for a CO2 capture unit that meets the minimum size requirements; an Environmental Impact Assessment (EIA) that addresses impacts arising from the capture plant; and documentation to ensure compliance with all other existing policy including that any of the plant's capacity which is not to be fitted with CCS at the outset is carbon capture ready.
- 6.2.686.2.74 Nevertheless it can be seen that the Applicant has voluntarily met these policy requirements in the DCO Application namely the inclusion of technically





feasible plans for a CO<sub>2</sub> capture unit that meets the minimum size requirements (Indicative CO<sub>2</sub> Above Ground Installation Plans, **Application Document Ref. 4.12**; Carbon Capture Statement, **Application Document Ref. 5.8**); the ES considers the impacts arising from the entire Proposed Development including the carbon capture plant (Environmental Statements Vols I-III, **Application Document Refs. 6.2-6.4**); and provides carbon capture and compression on the entire generating capacity as demonstrated in the Carbon Capture Statement (**Application Document Ref. 5.8**).

- <u>6.2.75</u> In summary it is clear that the Proposed Development exceeds the requirements of NPS policy in relation to carbon capture readiness, as it represents a considerably greater commitment to removing barriers to carbon capture, and deploying carbon capture and compression infrastructure, than is required by NPS EN-1 section 4.7 and NPS EN-2 section 2.3.
- 6.2.76 The emerging Draft EN-1 goes into more detail about Carbon Capture and Storage. It mentions the Government's ambitions for CCS and Part 3 sets out the need for CCS and the role power CCS could pay in our electricity system. It states that the types of environmental impacts of a gas-fired power CCS station should be similar to an unabated gas-fired power station, including landscape and visual impact and noise and vibration impacts, and so the assessment principles for the generating station covered in EN-2 should be similarly applied.
- 6.2.77 It states that carbon capture plant must be included as part of the application and goes on to require planning applications to show technically feasible plans for the CO2 capture plant as well as setting out the environmental impacts and considerations.
- 6.2.78 The Proposed Development includes all necessary carbon capture plant while the Application Documents set out -and consider environmental impacts and other considerations
- 6.2.79 Draft paragraph 4.8.6 acknowledges that -development consent applications for power CCS projects may not include an application for the full CCS chain, as is the case with the Proposed Development "However, development consent applications for power CCS projects should include details of how the captured CO2 is intended to be transported and stored, how cumulative impacts will be assessed and whether any necessary consents, permits and licences have been obtained."
- 6.2.80 The Proposed Development is not for a full CCS chain and it is proposed to connect into a gathering network operated by National Grid Carbon Limited. This is set out in more detail in Section 1.4 of this report. The above conclusions are therefore unaffected.
- 6.2.696.2.81 Draft paragraphs 4.8.7 4.8.8 contain information about the transportation and storage of carbon dioxide which is not considered of relevance to this application.





<u>Climate change adaptation (NPS EN-1, 4.8; EN-2, 2.3.13-2.3.14, EN-4 2.2 and EN-5, 2.4)</u>

- 6.2.706.2.82 EN-1 (paragraph 4.8.5) states that new energy infrastructure will typically be a long-term investment and will need to remain operational over many decades, in the face of a changing climate. Consequently, applicants must consider the impacts of climate change, such as potential for increased flooding, when planning the location, design, build, operation and, where appropriate, decommissioning of new energy infrastructure. The ES should set out how the proposal will take account of the Proposed Development's impact on climate change. While not required by the EIA Directive, this information will be needed by the SoS.
- 6.2.716.2.83 EN-2 (paragraph 2.3.13) notes that as fossil fuel generating stations are likely to be proposed for coastal or estuarine sites and climate change is likely, for example, to increase risks from flooding or rising sea levels; applicants should in particular set out how the proposal would be resilient to coastal changes and increased risk from tidal and storm surge; the effects of higher temperatures, including higher temperatures of cooling water, and increased risk of drought leading to a lack of available cooling water. These matters should be assessed in the ES (EN-2, paragraph 2.3.14).
- 6.2.726.2.84 EN-4 (paragraph 2.2.2) states that gas pipelines and other infrastructure should be resilient to increased risk of flooding; effects of rising sea levels and increased risk of storm surge; higher temperatures; increased risk of earth movement or subsidence from increased risk of flooding and drought; and any other increased risks identified in the applicant's assessment.
- 6.2.736.2.85 EN-5 (paragraph 2.4.1) refers to the need to consider the effects of flooding, particularly upon substation infrastructure, winds and storms on overhead lines, higher temperatures leading to increased transmission losses and earth movement or subsidence caused by flooding or drought on underground cables.
- 6.2.746.2.86 ES Volume I Chapter 17 (Climate Change and Sustainability) (Application Document Ref. 6.2.17) provides information and considers the potential vulnerability of the Proposed Development to climate change and the potential effects of flooding in relation to the Proposed Development, including rising sea levels and tidal surge. The Chapter is supported by the Sustainability Review at ES Volume II Appendix 17A (Application Document Ref. 6.3.33).
- 6.2.756.2.87 The draft DCO includes Requirements 12 'Surface Water drainage', 13 'Foul water drainage' and 14 'Flood risk mitigation' that require the submission of details for approval prior to the commencement of works on the relevant part of the Proposed Development relating to surface, foul water drainage and flood risk mitigation respectively.
- <u>6.2.88</u> It is therefore considered that the Proposed Development would mitigate the effects of climate change, while its design would ensure that it is resilient to the





future potential effects of climate change. The Proposed Development therefore complies with the NPSs.

- 6.2.89 The emerging Draft EN-1 adds that "low carbon development is an adaptive measure to address climate change". It also adds that Applicant's should consider nature-based solutions for adaptation. It states that applicants should consider the impacts on and from their Proposed Development across a range of climate change scenarios and demonstrate resilience and adaptability. The Draft EN-4 makes reference to the Government's Policy Statement on flood and coastal erosion risk management, highlighting the responsibility of developers to improve preparedness and to take action during floods to reduce disruption.
- 6.2.766.2.90 It is considered that the above matters are suitable considered in ES Volume I Chapter 13 (Geology, Hydrogeology and Land) and Chapter 17 (Climate Change and Sustainability) (Application Document Ref. 6.2.17). The above conclusions are therefore unaffected.

Grid connection (NPS EN-1, 4.9; and EN-2, 2.2.10 - 2.2.11)

- 6.2.776.2.91 EN-1 (paragraph 4.9.1) states that the connection of a generating station to the electricity network is an important consideration for applicants. It is for the applicant to ensure there will be the necessary infrastructure and capacity within the transmission and distribution network to accommodate the electricity generated. While it is not necessary for an applicant to have received or accepted a formal grid connection offer at the time of submitting an application for a DCO and this is at the applicant's risk, the SoS will want to be satisfied that there is no obvious reason why a grid connection would not be possible.
- 6.2.786.2.92 EN-2 (paragraphs 2.2.10 2.2.11) highlights that the technical feasibility of the export of electricity from a generating station is dependent on the capacity of the grid network together with the voltage and distance of the connection. Furthermore, applicants will usually have assured themselves that a viable connection existing before submitting an application for a DCO and where they have not done so they take a commercial risk. Even if the precise route of a connection has not been identified, in accordance with Section 4.9 of EN-1 any application must include information on how the generating station is to be connected and whether there are any particular environmental issues likely to arise from that connection.
- 6.2.796.2.93 The existing electrical infrastructure in the area comprises 132 kilovolt (kV) and 400 kV overhead lines as well as underground cables that serve existing substations.
- 6.2.806.2.94 In order to export electricity from the Proposed Development, engagement is ongoing with NGET to identify the preferred connection option including any upgrades to existing switchgear or other existing equipment that may be required. The Proposed Development will require a direct connection to the 400kV system and will connect to the existing National Grid 400kV





Substation directly to the east of the Proposed PCC Site. The connection between the Proposed Development and existing 400kV substation would comprise 400kV electrical cables which would be installed either above ground or below ground, or a combination of both (**Work No. 3A**) and is referred to as the Electrical Connection Area to National Grid 400kV Substation (as shown on Figure 3.3 (ES Volume III – **Application Document Ref. 6.4**)).

- 6.2.816.2.95 NGET will be responsible for the relevant connection works. No new overhead lines are proposed as part of the works required for the Proposed Development.
- 6.2.826.2.96 The Applicant has prepared a 'Grid Connection Statement' (**Application Document Ref. 5.2**) in order to satisfy the requirements of APFP Regulation 6(1)(a)(i) and Section 4.9 of EN-1.
- 6.2.836.2.97 It is considered that the Grid Connection Statement demonstrates that it is feasible to connect the Proposed Development to the electricity network and that the necessary agreements to facilitate this would be forthcoming.
- 6.2.98 The Proposed Development is likely to use generated power to supply the CCP auxiliary plant and equipment. An alternative option may also be used, with low voltage supply from the existing Northern Powergrid 132kV Substation on Chapel Lane (Work 3B). The cables would be routed either north via the route of the emergency access road, or south-west. Both routes are included within the application since it is not currently possible to survey the southern route for buried utilities and ground conditions as it is currently laid to hardstanding and occupied construction worker compounds for the construction and commissioning stages of the of the Keadby 2 Power Station development (until around Q2 2022).
- 6.2.846.2.99 The emerging Draft EN-1 contains further detail about the Government accelerating the co-ordination of the development of the grid network to facilitate the UK's net zero energy generation development and transmission and encourages Applicant's to contain generating stations and related infrastructure in a single application, as is the case with the Proposed Development. The above conclusions are therefore unaffected.

Pollution control and other environmental regulatory regimes (NPS EN-1, 4.10)

- 6.2.856.2.100 Section 4.10 of EN-1 (paragraph 4.10.1) advises that issues relating to discharges or emissions which affect air quality, water quality, land quality or noise and vibration may be subject to separate regulation under the pollution control framework or other consenting and licensing regimes.
- 6.2.866.2.101 Paragraph 4.10.3 states that in considering an application for development consent, the SoS should focus on whether the development itself is an acceptable use of the land, and on the impacts of that use, rather than the control of processes, emissions and discharges themselves. The SoS should work on the basis that the relevant pollution control regime and other





environmental regulatory regimes will be properly applied and enforced by the relevant regulator.

- 6.2.876.2.102 Paragraph 4.10.5 notes that many Proposed Developments covered by EN-1 will be subject to the Environmental Permitting ('EP') regime. Paragraph 4.10.6 advises applicants to make early contact with relevant regulators, such as the EA, to discuss their requirements for EPs and other consents. This will ensure that applications take account of all relevant environmental considerations and that the relevant regulators are able to provide timely advice and assurance to the SoS. Where possible, applicants are encouraged to submit applications for EPs and other necessary consents at the same time as applying to the SoS for development consent.
- 6.2.886.2.103 The Schedule of Other Consents and Licenses document (Application Document Ref. 5.5) lists the others consents and licences that are required for the Proposed Development that are being/will be advanced separately of the DCO Application. Table 2.1 of the Schedule of Other Consents and Licenses document lists the relevant consents and licences and details the discussions that have taken place to date with the relevant regulators.
- 6.2.896.2.104 The Other Consents and Licences document provides evidence that the Applicant is progressing the 'non-DCO' consents and licences required for the Proposed Development in a timely manner and indicates that there would be no impediment to these consents and licences being forthcoming. The Applicant will continue to progress the necessary consents and licences throughout the pre-examination period and, if required, during the examination and will update the document accordingly.
- <u>6.2.105</u> It is relevant to note that the draft DCO includes a number of requirements that would have the purpose of controlling the effects of the Proposed Development in terms of discharges and emissions during construction and operation in order to prevent pollution and safeguard amenity. In relation to the marine works a Deemed Marine Licence is included in the draft DCO, which includes conditions.
- 6.2.906.2.106 The emerging Draft EN-1 adds information relating to the control of pollution from industrial sources via the Environmental Permitting (England and Wales) Regulations 2016 and the requirement for larger industrial facilities undertaking specific types of activity to use Best Available Techniques. As mentioned above, The Schedule of Other Consents and Licenses document (Application Document Ref. 5.5) covers others consents such as environmental permits while the use of Best Available Techniques is covered in relevant Chapters of ES Volume I (Document Ref. 6.2). The above conclusions are therefore unaffected.





Safety (NPS EN-1, 4.11) and Control of Major Accident Hazards (EN-4, 2.5)

- 6.2.916.2.107 EN-1 paragraph 4.11.1 states that the Health and Safety Executive ('HSE') is responsible for enforcing a range of health and safety legislation, some of which is relevant to the construction, operation and decommissioning of energy infrastructure. Applicants should consult with the HSE on matters relating to safety.
- 6.2.926.2.108 Paragraph 4.11.2 confirms that some energy infrastructure will be subject to the 'Control of Major Accident Hazards' ('COMAH') Regulations 1999. These are aimed at preventing major accidents involving dangerous substances and limiting the consequences to people and the environment of any that do occur.
- 6.2.936.2.109 EN-4 (paragraph 2.5.1) highlights that gas supply infrastructure is subject to stringent safety standards under COMAH.
- 6.2.946.2.110 ES Volume I Chapter 18 (Major Accidents and Disasters) (Application Document Ref. 6.2.18) presents an assessment of the Major Accidents and Disasters (MA&D) that have the potential to arise during the construction, operation and decommissioning of the Proposed Development. This includes an assessment of the reasonably foreseeable worst-case environmental consequences (i.e. the likely significant effects), the measures envisaged to prevent or mitigate the likely significant adverse effects of such events on the environment, and details of the preparedness for and proposed response to MA&D hazards and threats relevant to the construction, operation and decommissioning of the Proposed Development.
- 6.2.956.2.111 The underlying objective of the assessment was to identify appropriate precautionary actions, to prevent or mitigate potentially significant risks associated with MA&D.
- 6.2.966.2.112 The assessment has identified the potential MA&D which could be applicable to the Proposed Development, associated with the substances present and operations to be undertaken. Principally, these could include fires, explosions and the release of CO<sub>2</sub> gas. These incidents have an extremely low probability of occurrence but could have significant impacts on people and the environment without mitigation.
- 6.2.976.2.113 The Proposed Development will be within an area of North Lincolnshire where similar facilities such as power plants and chemical works have been in operation for many years, including Keadby Power Station owned by the Applicant which forms part of the Proposed Development Site. Consequently, these hazards are well understood by plant operators and controlled by the regulatory authorities. The Applicant will draw on this expertise, in addition to its own experience of designing, building and operating major power generation facilities globally to reduce the risk of major accidents occurring to ALARP.





6.2.986.2.114 The engineering design of the Proposed Development will incorporate appropriate standards, proven design methods and control measures necessary to reduce the risks of such accidents to an acceptable level, i.e. ALARP, which is the standard expected by the regulatory authorities (HSE and Environment Agency).

- 6.2.996.2.115 The Proposed Development will require appropriate permissions to be in place for its operation including a COMAH licence, if required and Environmental Permit, and these regulatory controls will stipulate a number of requirements that must be demonstrated to prevent or minimise the effects of major accidents.
- <u>6.2.116</u> With the implementation of these measures in addition to those described in Tables 18.3 and 18.4 of Chapter 18, the MA&D risks are considered to have been mitigated to 'tolerable if ALARP' and therefore the effects are considered as 'not significant' for both plant construction and operation.
- 6.2.1006.2.117 The emerging Draft EN-1 does not add any materially new points with regards to safety. The emerging Draft EN-4 adds information regarding when underground storage sites come within the scope of COMAH, but this is not of relevance to the Proposed Development. The above conclusions are therefore unaffected.

Hazardous Substances (NPS EN-1, 4.12 and EN-4, 2.4)

- 6.2.1016.2.118 EN-1, paragraph 4.12.1, confirms that all establishments wishing to hold stocks of certain hazardous substances above a certain threshold need 'Hazardous Substances Consent' ('HSC'). Applicants should consult the HSE at the pre-application stage if a Proposed Development is likely to need such consent.
- 6.2.1026.2.119 EN-4 (paragraph 2.4.1) states that in the case of gas supply infrastructure the Health and Safety Executive (HSE) will advise the SoS on risks.
- 6.2.1036.2.120 As confirmed above, a COMAH licence application will be submitted to the HSE prior to construction once the volumes of hazardous substances have been established.
- 6.2.121 Further information on this is provided in the Schedule of Other Consents and Licenses (**Application Document Ref. 5.4**) which identifies the additional consents and licences that will be required for the Proposed Development and includes the COMAH and HSC applications.
- 6.2.1046.2.122 The emerging Draft EN-1 does not add materially new any points with regards to Hazardous Substances. Similarly, the emerging Draft EN-4 does not add any new points with regards to Hazardous Substances. The above conclusions are therefore unaffected.





Heath (NPS EN-1, 4.13)

- 6.2.1056.2.123 Section 4.13 of EN-1 highlights that energy production has the potential to impact on the health and well-being of the population (paragraph 4.13.1) and that where the Proposed Development has the potential to result in effects on human beings, the ES should assess those effects for each element of the Proposed Development, identifying any adverse health impacts and measures to avoid, reduce or compensate the impacts as appropriate (paragraph 4.13.2).
- 6.2.1066.2.124 The need for a health impact assessment or a separate human health chapter within the ES was not identified during EIA scoping. However, the potential effects of the Proposed Development on human health from emissions to air have been assessed as part of the EIA.
- 6.2.1076.2.125 ES Volume II Appendix 16A: Population and Health Signposting (Application Document Ref. 6.3.32) considers the potential effects of the Proposed Development on human health including wellbeing. It found that the only moderate adverse (significant) residual effect related visual amenity effects from a number of viewpoints during the construction, operation and decommissioning of the Proposed Development. There was also a major beneficial (significant) residual effect related to the employment created during the construction of the Proposed Development.
- <u>6.2.126</u> Furthermore, the various Chapters of ES Volume I individually cover the potential impacts on human health from various aspects of the Proposed Development.
- 6.2.1086.2.127 The emerging Draft EN-1 Policy provides additional guidance for health impacts stating that not all potential sources of health impacts will be mitigated in the ways stated in 4.3.2 and the Secretary of State will take account of health concerns when setting requirements relating to a range of impacts such as noise. The above conclusions are unaffected by these changes.

Common law nuisance and statutory nuisance (NPS EN-1, 4.14)

- 6.2.1096.2.128 Paragraph 4.14.2 of EN-1 states that it is very important that, at the application stage of an energy NSIP, possible sources of nuisance under Section 79(1) of the Environmental Protection Act (EPA) 1990, and how they may be mitigated or limited are considered by the SoS so that appropriate requirements can be included in any subsequent order granting development consent.
- 6.2.1106.2.129 The Applicant has prepared a Statutory Nuisance Statement (Application Document Ref. 5.9) that identifies the matters set out at Section 79(1) of the EPA in respect of statutory nuisance and considers if the Proposed Development could result in a nuisance and the measures, where relevant, to prevent and mitigate such nuisance occurring. Section 4 provides an assessment of the potential for nuisance taking account of the assessments





undertaken for the EIA. The matters considered include the condition/state of premises; smoke; fumes or gases; dust, steam, smell or other effluvia; accumulations or deposits; keeping of animals; insects; artificial light; noise; and any other matter declared by enactment to be statutory nuisance. A number of matters are not relevant to the Proposed Development and are more relevance to other form of infrastructure (e.g. insects in respect of waste facilities).

- 6.2.130 Taking account of mitigation no statutory nuisance effects are considered likely to occur as a result of the Proposed Development. Mitigation is both embedded within the design of the Proposed Development and mitigation and controls will be secured during both construction and operation by a number of requirements (Schedule 2 of the draft DCO Document Ref. 2.1). Furthermore, the operation of the Proposed Development would be regulated by the EA through environmental permitting would undergo regular monitoring and reporting.
- 6.2.1116.2.131 The emerging Draft EN-1 does not add any new points with regards to common law nuisance and statutory nuisance. The above conclusions are therefore unaffected

Security considerations (NPS EN-1, 4.15)

- 6.2.1126.2.132 Paragraph 4.15.1 states that national security considerations apply across all national infrastructure sectors. Overall responsibility for security of the energy sector lies with DECC (now BEIS). Paragraph 4.15.2 goes on to state that Government policy is to ensure that, where possible, proportionate protective security measures are designed into new infrastructure Proposed Developments at an early stage in the Proposed Development.
- 6.2.1136.2.133 Where applications for development consent for infrastructure relate to potentially critical infrastructure, there may be national security considerations, which will be identified to the relevant government department (BEIS) by the Centre for Protection of National Infrastructure (CPNI).
- 6.2.1146.2.134 The Proposed Development will be secure and the Applicants will consult with the appropriate bodies prior to construction in respect of security considerations and measures. Requirement 10 'Site security' of Schedule 2 of the draft DCO (**Application Document Ref. 2.1**) required the submission and approval of a written scheme detailing security measures to minimise the risk of crime.
- <u>6.2.135</u> The Proposed Development therefore accords with the key assessment principles of the energy NPSs.
- 6.2.1156.2.136 The emerging Draft EN-1 does not add any new points with regards to security considerations. The above conclusions are therefore unaffected.





## 6.3 National Policy Statements: Generic Impacts

- 6.3.1 The 'generic impacts' set out in Part 4 of EN-1 are considered below in Table 6.2. Where the same impacts appear in the 'assessment and technology-specific information' parts of EN-2, EN-4 and EN-5 they are also dealt with below and the relevant part of the NPS is referenced.
- 6.3.2 In the final column of Table 6.2 references are made to key mitigation commitments that are secured in the Draft DCO (Application Document Ref. 2.1). However, for a comprehensive list of mitigation commitments please refer to the (Application Document Ref. 6.4), which forms part of the Environmental Statement, a document that will be certified under Article 43 and Schedule 12 of the Draft DCO.







# Table 6.2: Generic Impacts

Generic Impact	Summary	Assessment	Emerging NPS
Air quality and emissions (EN-1, 5.2 and EN-2, 2.5)	air quality and emissions are likely to be a key area of concern when assess	ES Volume I (Application Document Ref. 6.2.8) addresses the potential air quality effects of the Proposed Development. The air quality assessment of construction impacts assumes that the measures	from development but also add the requirement of a carbon assessment.Paragraph5.3.4 instructs applicants to include a carbon assessment as part of any proposal for energy
	combustion plants are generally released through exhaust stacks. Design of exhaust stacks, particularly height, is the primary driver for the delivery of optimal dispersion of emissions and is often determined by statutory requirements." Paragraphs 5.2.6 and 5.2.7 of EN-1 set out the requirements for	Development, as they are standard best practice measures that are routinely applied across UK construction sites. These are secured in the Framework CEMP, compliance with which is a requirement in Schedule 2 of the Draft DCO	Paragraph 5.3.7 states: "Any carbon assessment will include an assessment of operational GHG emissions, but the policies set out in Part 2, including the UK ETS, apply to these emissions. Operational emissions will be addressed in a managed, economy-wide manner, to ensure consistency with carbon budgets, net zero



Generic Impact	Summary	Assessment	Emerging NPS
	applicants to assess	mitigation has been	commitments. The Secretary of
	issues relating to air	•	State does not, therefore need
	quality and emissions as		to assess individual
	part of an ES.	Proposed Development. For	applications for planning
		this reason, the residual	consent against operational
	EN-1 states that the ES	effects are identified to be	carbon emissions and their
	should describe:	not significant.	contribution to carbon budgets,
			net zero and our international
	any significant air	Consistent with construction	climate commitments".
	emissions, their	mitigation, it has been	
	mitigation and any	assumed that relevant best	
	residual effects	practice mitigation measures	The carbon assessment should
	distinguishing between	would be in place during any	be a part of the mitigation
	the Proposed	decommissioning works. No	strategy to reduce GHG
	Development stages and	additional mitigation has	emissions at every stage of
	taking account of any	been identified as necessary	development to ensure
	significant emissions	for the decommissioning	emissions are minimised as
	from any road traffic	phase of the Proposed	much as possible.
	generated by the	Development.	
	Proposed Development;		The Applicant has considered
	the predicted absolute		the impact of the development
	emission levels of the		on Air Quality through an
	proposed Development,		assessment of carbon
	after mitigation methods		
	have been applied;	as required and in	17: Climate Change and
		accordance with use of BAT	<u>Sustainability (ES Volume I –</u>



Generic Impact	Summary	Assessment	Emerging NPS
	existing air quality levels and the relative change in air quality from existing levels; and and potential eutrophication impacts. Paragraph 5.2.9 states that air quality considerations will be given substantial weight where a Proposed Development would lead to deterioration in air quality in an area, or leads to a new area where air quality breaches any national air quality limits. Air quality breaches any national air quality limits. Air quality considerations will also be important where substantial changes in air quality levels are expected, even if this does not lead to any	permitting regime. The use of acid wash and/ or reheat has been identified as potentially necessary for the operational phase of the Proposed Development. For this reason, the residual effects would be not significant. There is a single AQMA designated within the administrative boundary of NLC. The AQMA is approximately 6.2km from the Proposed Development and covers an area surrounding the steelworks to the east of Scunthorpe and was designated due to the exceedance of the PM10 24 hour mean National Air Quality Objective. It is not	6.2). Furthermore, this Proposed Development also purposefully seeks to abate carbon dioxide emissions through the proposed carbon capture plant. Accordingly, the change of policy in EN-1 Paragraph 5.3.7 has no impact on the Proposed Development.



Generic Impact	Summary	Assessment	Emerging NPS
	breaches of national air quality limits. Paragraph 5.2.10 requires decisions to take account of any relevant statutory air quality limits. Where the limits would be breached, developers should work with the relevant authorities to secure appropriate mitigation measures to allow the proposal to proceed. Consideration should be given whether mitigation measures are needed for both operational and construction emissions. A construction management plan may help codify mitigation.	impact upon the air quality within the AQMA as the AQMA has not been declared for a pollutant species emitted from the operational Proposed Development. The impacts at all nationally and international designed ecological receptors are considered unlikely to give rise to significant effects with the exception of at TE11a (part of Humber Estuary) where the predicted change in air pollutant concentrations is 1.9% of the Critical Level. The assessment is based on peak construction traffic flows and assumes that this peak flow will continue for a full year of construction. In reality, the peak is	
		anticipated to last for up to	



Generic Impact	Summary	Assessment	Emerging NPS
	EN-2 (paragraph 2.5.5) confirms that the applicant should carry out an assessment as required by EN-1, consulting the Environment Agency ('EA') and other statutory consultees. Paragraph 2.5.6 goes on to state that in considering whether to grant consent, the SoS should take account of likely environmental impacts resulting from air emissions and that in the case of SOX, NOX or particulates it follows the advice in EN-1 on interaction with the EA's regulatory processes.	course of a year traffic flows will be much lower, and he predicted change in NOx will also be lower. It is therefore considered that these changes are unlikely to give rise to significant effects at TE11a. The impacts of all pollutant species released from the operational Proposed Development are predicted to result in negligible adverse effects at all receptors within the Study	



Generic Impact	Summary	Assessment	Emerging NPS
		The impacts of daily NOx at	
		the worst-affected ecological receptor (Three Rivers LWS)	
		has been assessed as a	
		medium magnitude of	
		impact. Annual average	
		impacts of NOx at the worst-	
		affected receptor (Humber	
		Estuary Ramsar/ SAC/ SSSI) are considered to	
		have a negligible adverse	
		impact and therefore effects	
		are considered to be not	
		significant. The annual mean	
		NH3 impacts at the worst-	
		affected ecological receptor (Humber Estuary Ramsar/	
		SAC/ SSSI) is considered to	
		be not significant. Annual	
		average impacts of NH3 for	
		the worst-affected receptor	
		sites that are assigned the	
		lower NH3 critical level for the protection of lichens and	
		bryophytes have a very low/	
		low magnitude of impact.	



Generic Impact	Summary	Assessment	Emerging NPS
		An assessment of cumulative impacts with other proposed developments that could interact with the impacts and effects of this Proposed Development have been assessed within ES Volume II Appendix 8B: Air Quality – Operational Assessment (Application Document Ref. 6.3) and summarised in Chapter 19: Cumulative and Combined Effects (ES Volume I – Application Document Ref. 6.2). The impact of cumulative operational emissions on nutrient nitrogen deposition for relevant habitats is considered in the Habitat Regulations – Appropriate Assessment report (Application Document Ref. 5.12). There were no	



Generic Impact	Summary	Assessment	Emerging NPS
		significant combined or cumulative effects identified in ES Volume I (Cumulative and Combined Effects) (Application Document Ref. 6.2.19).	
		It is therefore considered that, through the use of appropriate mitigation, the Proposed Development is in conformity with EN-1 and EN-2.	
Biodiversity and geological conservation (EN-1, 5.3; EN-4 2.21; and EN-5, 2.7)	Paragraph 5.3.18 of EN- 1 states that during construction appropriate mitigation measures should be included to ensure that activities will be confined to the minimum areas required		mitigation measures for biodiversity but expands the scope for which protective measures must be considered
	for the works and to ensure that the risk of disturbance or damage to species is minimised.	The Proposed Development has been sensitively designed and positioned with reference to the existing	the design process should include nature inclusive design. Development Proposals should consider the ambitions of the



Generic Impact	Summary	Assessment	Emerging NPS
	Paragraph 5.3.18 of EN-		contribute to Biodiversity Net
	1 also states that, during		Gain. Energy Infrastructure
	operation, appropriate mitigation measures		
	should be included to	residual construction,	
	ensure that the risk of	,	Net Gain. The scope of these
	disturbance or damage	•	
	to species is minimised.	•	
	Development should aim	construction of the Proposed	scale, and location of each
	to avoid significant harm	Development.	project.
	to biodiversity and		
	geological conservation		Paragraph 5.4.8 has been
	interests through		
	mitigation and	-	
	consideration of		and enhance biodiversity and
	reasonable alternatives.	Proposed Development are described and demonstrated	<u>geological</u> conservation interests:
	EN-4 (Section 2.21)		Interests.
	considers the effects of		"The Habitats Regulations set
	gas pipelines on	,	out sites for which an HRA will
	biodiversity. It notes that		assess the implications of a
	many effects will be		
	temporary in nature and		
	that applications should	compliance with which is	and Special Protection Areas.
	include proposals for the		
l	reinstatement of the	(Landscaping and	following should be given the



Generic Impact	Summary	Assessment	Emerging NPS
	pipelineroutetoitsoriginal state as close aspossible.EN-5(Section 2.7)considers the effects thatelectricitynetworkinfrastructurecan haveonbiodiversity,especiallybirds.Paragraph 2.7.2 requiresthe applicant to consideranysuchpossibleimpacts,particularly onfeedingandhuntinggrounds,migrationcorridorsandbreeding	<ul> <li>management and enhancement) of Schedule 2 of the draft DCO (Application Document Ref. 2.1). In summary, these include:</li> <li>A Water Vole Mitigation Strategy will be prepared and agreed with relevant stakeholders o specify the measures and supervision required to deliver legislative compliance during</li> </ul>	Protection Areas and possibleSpecial Areas of Conservation;listed or proposed Ramsarsites; andsites identified, or required, ascompensatory measures foradverse effects on other HRAsites."Paragraph 5.4.13 retainsprotective measures forAncient and Veteran Tresesbut removes the advice for theSecretary of State to refuseconsent based on the loss ofAncient Woodland. The policyhas been altered to state thatApplicants must provide asuitable compensation strategywhere development wouldresult tin the loss ordeterioration of an ancient



Generic Impact	Summary	Assessment	Emerging NPS
		measures and supervision required to deliver legislative compliance during installation and drawdown of any cofferdam used for the upgrade of the River Water Abstraction Option (if chosen) on the River Trent or the Canal Water Abstraction Option on the Stainforth and Keadby Canal. This would also apply if relevant to replacement of the existing Mabey Bridge over the Hatfield Waste Drain LWS. • Vegetation clearance and construction excavations have potential to affect wildlife and may result in offences under animal welfare legislation. An ECoW would be employed to supervise all relevant works to provide guidance on the measures required day-to-day to	Paragraph5.4.18specifieschangesinmitigationrequirementsforbirds. Theapplicantshouldnowdemonstratethat the timing ofconstruction has been plannedtoavoid/minimisedisturbancetobirdsduringbreedingseason.Furthermore,mitigationmeasuresshouldlooklooktoenhanceexistinghabitatsratherthem.Paragraph5.4.20goeson tostate:"There should also bespecificmeasures toimpact to fish and aquatic biotabyentrainmentminimiseandimpingementorbyexcessiveheat or biocidal chemicals fromdischargestoreceiving



Generic Impact	Summary	Assessment	Emerging NPS
		<ul> <li>deliver legislative compliance.</li> <li>All excavations would be covered overnight, or where this is not practicable, a means of escape would be fitted e.g. battered soil slope or scaffold plank, to provide an escape route should any animals (e.g. reptiles, badger, otter, brown hare, hedgehog) stray into the construction site and fall into an excavation.</li> <li>A plant INNS survey will be undertaken prior to construction to determine the current location and extent of plant INNS, and to inform specification of the ISMP. If determined as necessary through this survey and after consideration of other</li> </ul>	Paragraph5.4.22adds:Generalguidancesuggeststhatanyhabitatcreationthatanyhabitatcreationenhancementdeliveredforbiodiversitynetgainshouldbemaintainedforatleast30years.The Applicant has addressedthepotentialimpactsoftheProposedDevelopmentonBiodiversityinChapter11:BiodiversityandNature
		available plant and animal INNS data, an ISMP will be	Plan (LBMEP) (Application



Generic Impact	Summary	Assessment	Emerging NPS
		prepared to accompany the final CEMP (secured by Requirement 17) and would be agreed with relevant stakeholders. The ISMP would specify the measures and supervision necessary during construction to prevent the spread of plant and animal INNS to new locations.	5.4.19. It also confirms that the proposed enhancement measures are suitable to achieve no net loss and a net gain in biodiversity within the Proposed Development Site. Therefore, taking into account
		Chapter 13 (Geology, Hydrogeology and Land Contamination) of the ES Volume I (Application Document Ref. 6.2.13) addresses the potential effects of the construction, operation (including maintenance) and decommissioning of the Proposed Development on geology, hydrogeology and land contamination (considering effects to and	EN-4 considers the long-term potential impact of gas pipelines on biodiversity to be limited. The focus of EN-4 has remained the same with the addition of the below policy. The changes to EN-4 with respect to Biodiversity are not relevant to the operations of the Proposed Development.



Summary	Assessment	Emerging NPS
	from any existing	the Proposed Development
	contamination and also any	
	potential to cause	
	contamination). It found that	EN-5 maintains its focus on the
	effects related to potential	
	geological and land	· · · · · · · · · · · · · · · · · · ·
	<b>U</b>	
	0 1	
	significant).	with the recognition for the
		excellent opportunitie
		infrastructure provide.
	•	In respect of the changes t
	,	
		Biodiversity remain unchanged
	<b>.</b>	
-	Summary	from any existing contamination and also any potential to cause contamination). It found that effects related to potential geological and land



Generic Impact	Summary	Assessment	Emerging NPS
		significant harm to person or pollution of controlled waters or the environment.	
		There were no significant combined or cumulative effects identified in ES Volume I (Cumulative and Combined Effects) (Application Document Ref. 6.2.19).	
		It is therefore considered that, through the use of appropriate mitigation, the Proposed Development is in conformity with EN-1, EN-4 and EN-5.	
Civil and military aviation and defence interests (EN-1, 5.4)	EN-1, <b>Section 5.4</b> notes that civil and military aerodromes and aviation technical sites, as well as other types of defence interests can be affected by new energy developments.	No civil and military aviation and defence interests have been identified through the EIA Scoping or pre- application consultation that would be affected by the Proposed Development. The Applicant consulted the Civil	There are no notable changes to EN-1 with regards to Civil and military aviation and defence interests. Accordingly, the assessment of the Proposed Development is unchanged.



Generic Impact	Summary	Assessment	Emerging NPS
		Aviation Authority ('CAA'), Defence Infrastructure Organisation ('DIO') and NATS on the proposed Development. The CAA replied on 15.12.20 with no objection but advised that in order to fulfil their safeguarding responsibilities a number of airports should be consulted and that it would be sensible to establish the views of local emergency service air support units. These bodies were consulted during targeted re-consultation.	
		Appropriate aviation warning lighting and notification of details to the UK DVOF & Powerlines at the Defence Geographic Centre are secured prior to commencement through DCO Schedule 2	



Generic Impact	Summary	Assessment	Emerging NPS
		Requirements 34 'Aviation warning light and 35 'Air Safety' (Application Document Ref. 2.1).	
		It is therefore considered that, through appropriate mitigation, the Proposed Development is in conformity with EN-1.	
Dust, odour, artificial light, smoke and steam (EN-1, 5.6 and EN- 2, 2.8)	acknowledges that the construction/demolition,	Chapter 8 'Air Quality' of the ES Volume I (Application Document Ref. 6.2.8) sets out the potential emissions to air from the construction, operation and decommissioning of the Proposed Development. In particular, the chapter considers potential impacts on identified human health and ecological receptors in terms of dust generation	



Generic Impact	Summary	Assessment	Emerging NPS
	impacts. It is advised that	Odour, artificial light, smoke	
	the assessment should	and steam are dealt with in	
	describe:	the Statutory Nuisance	
		Statement (Application	
	the type, quantity and	Document Ref. 5.9), which	
	timing of emissions;	identifies the matters set out	
	aspects of the	at Section 79(1) of the EPA	
	development which may	in respect of statutory	
	give rise to emissions;	nuisance and considers if	
	premises or locations		
	that may be affected by		
	the emissions;	and the measures, where	
		relevant, to prevent and	
	on identified premises or	•	
	locations; and	occurring.	
	measures to be		
	employed in preventing		
	or mitigating the		
	emissions.	provides an assessment of	
		the potential for nuisance	
	Paragraph 5.6.7 of EN-1	•	
	states that, in decision		
	<b>.</b>	the EIA. The matters	
	be satisfied that an		
		condition/state of premises;	
	potential effects in	smoke; fumes or gases;	



Generic Impact	Summary	Assessment	Emerging NPS
	respect of artificial light, dust, odour, smoke and steam has been carried out; and be satisfied that all reasonable steps have been taken to minimise any detrimental impacts.	dust, steam, smell or other effluvia; accumulations or deposits; keeping of animals; insects; artificial light; noise; and any other matter declared by enactment to be statutory nuisance. A number of matters are not relevant to the Proposed Development and are more relevance to other form of infrastructure (e.g. insects in respect of waste facilities).	
		Taking account of mitigation no statutory nuisance effects are considered likely to occur as a result of the Proposed Development. Mitigation is both embedded within the design of the Proposed Development and mitigation and controls will be secured during both construction and operation	



Generic Impact	Summary	Assessment	Emerging NPS
		by a number of requirements set out in Schedule 2 of the draft DCO (Application Document Ref. 2.1). Furthermore, the operation of the Proposed Development would be regulated by the EA through environmental permitting would undergo regular monitoring and reporting.	
		It is therefore considered that, through appropriate mitigation and management, the Proposed Development is in conformity with EN-1 and EN-2.	
Flood risk (EN-1, 5.7; EN-4, 2.2.2- 2.2.3; and EN-5, 2.4.1)	requires that applications	Chapter 12 'Water Environment and Flood Risk' of the ES Volume I (Application Document Ref. 6.2.12) provides an assessment of likely significant effects on the	EN-1 remains largely unchanged from the existing NPS. However, some additions have been made. The minimum requirements for the Flood Risk Assessment (FRA) have been adjusted.



Generic Impact	Summary	Assessment	Emerging NPS
	and 3 in England should be accompanied by a Flood Risk Assessment ('FRA'). Similar considerations apply to gas supply pipelines (EN-4, paragraph 2.2.2) and in	construction, operational and decommissioning phases of the Proposed Development. A site-wide Flood Risk Assessment ('FRA') is provided at Appendix 12A of ES Volume	FRA should consider how the ability of water to soak into the
	relation to substations that are vital for the electricity transmission and distribution network (EN-5, paragraph 2.4.1). Applicants should set out how their developments will be resilient to flooding and not result in an increased risk of flooding.	the entire Proposed Development Site is within Flood Zone 3. However, the flood defences are sufficient to prevent overtopping during events with a 0.5% annual probability, the	Development. The noted changes to EN-1 have been addressed within the ES Volume I Chapter 12, (Water Environment and Flood Risk) (Application Document Ref. 6.2.12) and the ES Volume II Appendix 12A: Flood Risk Assessment (Application Document Ref. 6.3.20). Accordingly, the assessment of



Generic Impact	Summary	Assessment	Emerging NPS
		adverse (not significant) and neutral (not significant) effects on the River Trent, Stainforth and Keadby Canal and the various drains in the area. The Proposed Development is resilient to flooding and will not result in an increased risk of flooding elsewhere.	
		The location comprises largely previously developed land and the Proposed Development provides extensive wider sustainability benefits due to its role in providing high amounts of low carbon electricity generation consistent with the urgent need identified in NPS EN-1 paragraph 3.3.15 and which is corroborated by recent policy in the EWP and recent	



Generic Impact	Summary	Assessment	Emerging NPS
		official evidence from the CCC and NIC.	
		The Proposed Development therefore satisfies the Exception Test, with ES	
		Volume I Chapter 12, (Water Environment and Flood Risk) (Application	
		<b>Document Ref. 6.2.12</b> ) and ES Volume II Appendix 12A: Flood Risk Assessment ( <b>Application Document</b>	
		<b>Ref. 6.3.20</b> ) demonstrating that it would be safe and not result in significant effects in terms of flooding. The EA	
		has reviewed the Flood Risk Assessment undertaken by the Applicant at various stages pre application.	
		Details of the flood risk mitigation measures detailed within the DCO Application will be secured by	



Generic Impact	Summary	Assessment	Emerging NPS
		Requirement 14 'Flood risk mitigation' of the draft DCO (Application Document Ref. 2.1). Details of surface and foul water drainage (taking account of flood risk mitigation) will be secured by Requirements 12 and 13 respectively.	
		There were no significant combined or cumulative effects identified in ES Volume I (Cumulative and Combined Effects) (Application Document Ref. 6.2.19).	
		It is therefore considered that, through appropriate mitigation and management, the Proposed Development is in conformity with EN-1, EN-2 and EN-5.	



Generic Impact	Summary	Assessment	Emerging NPS
Historic environment (EN-1, 5.8)	<b>Section 5.8</b> of EN-1 acknowledges that the construction, operation and decommissioning of	Heritage' of the ES Volume I ( <b>Application Document</b>	its guidance on the Historic
	energy infrastructure has the potential to result in adverse impacts on the historic environment.	potential impacts on	adds that when assessing
	Paragraph 5.8.8 requires applicants to provide a description of the significance of the heritage assets affected by the proposed development and the contribution of their setting to that significance.	identification of non- designated assets was defined as 1km from the Proposed Development Site, with an extension to include the Isle of Axholme Area of Special Historic Interest. The	as well as indirect impacts, The extent and detail of these studies will be proportionate to the significance of the heritage asset affected. Chapter 15 'Cultural Heritage' of the ES Volume I (Application Document Ref. 6.2.12)
	Where a development site affects, or possibly includes heritage assets with an archaeological interest, the applicant should carry out an	assets and the potential impacts caused by development within their settings is set at 3km, with an extension to 5km for designated assets of the	and indirect impacts on designated heritage assets and non-designated heritage assets. Furthermore, the potential



Generic Impact	Summary	Assessment	Emerging NPS
	appropriate desk-based assessment. The extent of the impact of the proposed development on the significance of any heritage asset affected should be able to be adequately understood from the application documents.	Scheduled Monuments and Grade I listed buildings). Within the study area there are 41 designated heritage assets including two Scheduled Monuments (one of which is also a Grade II listed building known as	Appendix 15A: CulturalHeritageDesk-basedAssessment.(ES Volume II – ApplicationDocument Ref. 6.3). Furtherassessment of noise andvibration effects on culturaheritage are also presented inChapter 9: Noise and Vibration(ES Volume I - Application
	Paragraph 5.8.11 states that the SoS should assess the significance of any heritage asset that may be affected by the proposed development, taking account of: evidence provided with the application; any designation records;	three Grade I listed buildings, the remainder being Grade II listed buildings, and one conservation area. There are no World Heritage Sites, Registered Park and Gardens, Registered Battlefields, or Protected	6.2). Accordingly, the assessment of the Proposed
	the Historic Environment Record;	Due to the scale of the Proposed Development, it is	



Generic Impact	Summary	Assessment	Emerging NPS
	the heritage assets themselves; the outcome of consultations with interested parties; and where appropriate, expert advice.	to provide effective landscape screening will be limited. Therefore, the residual effects of the	
		One EIA significant effect was identified at the Isle of Axholme Area of Special Historic Landscape. The impact arises from the presence of the Proposed Development in combination with the existing Keadby 1 Power Station, Keadby 2 (under construction) and	



Generic Impact	Summary	Assessment	Emerging NPS
		Keadby Windfarm in distant	
		views from the asset and	
		through views of the	
		proposed permanent cabin	
		at the site access from the	
		A18. With regard to the latter	
		structure, due to its small	
		size, it is possible to	
		effectively screen the	
		structure in views from the	
		Isle of Axholme Area of	
		Special Historic Landscape	
		Interest, or to provide bespoke design solutions for	
		the cabin to minimise harm.	
		This should reduce the	
		potential impact of the	
		Proposed Development to	
		very low, on this asset of	
		high value, resulting in a	
		residual minor adverse	
		effect, which is not EIA	
		significant. Likewise, the	
		operation phase impact of	
		Scenario 2 (where the	
		Proposed Development is	



Generic Impact	Summary	Assessment	Emerging NPS
		operational and Keadby 1 Power Station is demolished) was also considered to reduce the potential impact of construction of the Proposed Development to very low, by reducing the concentration of this out of character infrastructure in the asset's setting. On this asset of high value, this results in a residual minor adverse effect, which is not EIA significant. If Scenario 2 occurs in combination with appropriate screening and design mitigation for the permanent gatehouse structure, then is considered to also result in a very low impact and a residual minor adverse effect, which is not EIA significant.	



Generic Impact	Summary	Assessment	Emerging NPS
		The magnitude of impact for most of the below ground archaeological remains reported under construction phase effects has been assessed as no impact or a low magnitude of impact, resulting in a neutral effect or minor adverse effect, which are not EIA significant. As such, there are no significant residual effects for these assets.	
		The magnitude of impact for the possible partial enclosures [AECOM3333] and [AECOM3334] has been assessed as high, resulting in a major adverse effect, which is EIA significant. Appropriate recording of archaeological remains prior to and during construction through archaeological evaluation and mitigation	



Generic Impact	Summary	Assessment	Emerging NPS
		would allow any below ground archaeological remains to be preserved by record. This would reduce the magnitude of impact on individual assets, resulting in a residual minor adverse	
		effect, which is not EIA significant. A written scheme of investigation and any necessary further	
		archaeological investigations are secured by Requirement 16 'Archaeology' of Schedule 2 of the Draft DCO (Application Document Ref. 2.1).	
		There were no significant combined or cumulative effects identified in ES Volume I (Cumulative and Combined Effects)	



Generic Impact	Summary	Assessment	Emerging NPS
		(Application Document Ref. 6.2.19).	
		It is therefore considered that the Proposed Development is in conformity with EN-1.	
Landscape and Visual (EN-1, 5.9, EN-2, 2.6; EN-4, 2.21; and EN-5, 2.8)	effects may be	Visual Amenity' of the ES Volume I (Application Document Ref. 6.2.14) addresses the potential effects of the construction, opening, operation (including maintenance) and decommissioning of the Proposed Development on landscape character (as a resource in its own right) and visual amenity. Views of the Proposed Development other than those assessed are	or additions to EN-1, EN-4 or EN-5 with regard to Landscape and Visual impacts of relevance to the Proposed Development. Paragraph 2.11.14 adds more guidance to undergrounding of power lines. In the case of undergrounding, the developer should set out their commitment in the ES, to mitigate the potential detrimental effects of undergrounding works on any relevant agricultural land and soils, particularly regarding



Summary	Assessment	Emerging NPS
that the SoS should consider the design of the development, taking	catalogue of views of the Site, rather they provide a representative sample for	guarantee appropriate handling of soil, backfilling, and return of the land to the baseline Agricultural Land
the landscape and siting, operational and other	and visual amenity assessment, using viewpoints agreed with consultees.	ensuring no loss or degradation of agricultural
reasonable mitigation.	determined that the Proposed Development is	undergrounded 400kV power lines as part of Work 3A, and 132kV power lines as part of
recognises that all proposed energy infrastructure is likely to have visual effects for	adverse effect on visual amenity during all assessment scenarios from viewpoints 1 (Chapel Lane	short distances and located in brownfield land, or in existing farm tracks, or otherwise
proposed sites; however, in determining proposals, a judgement is to be made as to whether the visual	Keepers Residence, Keadby) and 4 (PRoW (KEAD9, KEAD10) north of Keadby) and for the operation assessment	
	Paragraph 5.9.17 states that the SoS should consider the design of the development, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by reasonable mitigation. Paragraph 5.9.18 recognises that all proposed energy infrastructure is likely to have visual effects for receptors around proposals, a judgement is to be made as to whether the visual	Paragraph 5.9.17 states that the SoS should consider the design of the development, taking accountto provide an exhaustive or fullyaccountof the development, taking accountof environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by reasonable mitigation.to provide an exhaustive or fullyParagraph5.9.18 the landscape, including by reasonable mitigation.The assessment operational and other relevant constraints, to minimise harm to the landscape, including by reasonable mitigation.The assessment has determined that the Proposed Development is likely to result in a significant adverse effect on visual amenity during all assessment scenarios from viewpoints 1 (Chapel Lane West, Keadby), 2 (Gate Keepers Residence, keadby) and 4 (PRoW (KEAD9, KEAD10) north of Keadby) and for the operation



Generic Impact	Summary	Assessment	Emerging NPS
	receptors outweigh the benefits of the development.	Power Station present for viewpoint 6 (Trunk Road, Keadby) as a result of the close distance to the	
	<b>Section 2.6</b> of EN-2 sets out the landscape and visual considerations in relation to fossil fuel	and lack of intervening vegetation.	
	generating stations, recognising that many of the main structures (e.g. boiler and turbine halls	mitigation measures would not be effective in reducing this visibility, none are	
	and emissions stacks) are large and will have an impact upon the surrounding landscape and visual amenity.	significant adverse effects	
	Paragraph 2.6.3 states that applicants should include a Landscape and	0	
	Visual Impact Assessment ('LVIA') as part of the ES and	Statement(ApplicationDocumentRef.submittedwiththisDCO	
	consider the design of the plant and materials to be used, including the	<b>U</b>	



Generic Impact	Summary	Assessment	Emerging NPS
		The design of the Proposed Development will be secured via Requirements 5 'Detailed design' and 6 'Landscaping and biodiversity protection management and enhancement' in Schedule 2 of the draft DCO ( <b>Application Document</b>	
	be limited as the infrastructure is usually buried. Impacts are likely to include limitations on the ability	combined or cumulative effects identified in ES Volume I (Cumulative and Combined Effects) (Application Document Ref. 6.2.19).	



Generic Impact	Summary	Assessment	Emerging NPS
	features such as hedgerows or deep- rooted trees over or adjacent to the pipeline and the structures/indication points necessary to identify the pipeline route and provide it with service access.	outweigh the impacts on Viewpoints 1, 2, 4 and 6. It is therefore considered that the Proposed Development is in conformity with EN-1, EN-2,	
	EN-5 paragraph 2.8.4 requires applicants to give appropriate consideration to undergrounding electrical connections as a way of mitigating landscape and visual impacts.		
Land use including open space green infrastructure and Greer	EN-1 notes at Section 5.10 that as energy infrastructure developments will have direct effects on the	,	The guidance of EN-1 remains largely unchanged but adds that applicants should consider producing Soil Management Plan which could help minimise potential land contamination.



Generic Impact	Summary	Assessment	Emerging NPS
Belt (EN-1, 5.10)	proposed site and may have indirect effects on the use, or planned use, of land in the vicinity for other types of development. Paragraph 5.10.3 recognises that it may not be possible for many forms of energy infrastructure to be sited on previously developed land, while paragraph 5.10.5 requires applicants to assess the effects of the proposed development on existing land uses at and near the site. Paragraph 5.10.9 requires applicants to safeguard any mineral resources on the proposed site as far as	surrounding area. The Proposed PCC Site covers an area of approximately 18.7ha of the Keadby Power Station site that is located within an area called Keadby Common, although this is not defined as Common Land. This part of the Keadby Common was historically associated with a former coal-fired power station that was demolished in the 1990's. Until circa 2017/ 2018, this area was used for arable production but has since been re- seeded. The northern areas of Keadby Common where the CCGT and CCP are proposed (referred to as the	Contamination Document (Ref. 6.2) provides assessment of potential contamination. Furthermore, a Soil Resources Plan is included in the Framework CEMP (Application Document Ref. 7.1).



Generic Impact	Summary	Assessment	Emerging NPS
	<ul> <li>possible, taking into account the long-term potential of the land use after any future decommissioning has taken place.</li> <li>Paragraph 5.10.9 states mitigation measures should be considered for development affecting green infrastructure to ensure the connectivity of the green infrastructure network is maintained.</li> </ul>	<ul> <li>development of a Low Carbon Gas Generating Station, as opposed to other potentially available sites for the following reasons:</li> <li>the Proposed</li> </ul>	



Generic Impact	Summary	Assessment	Emerging NPS
		<ul> <li>into the Proposed Development Site to enable the transport of captured carbon dioxide from the Proposed Development to permanent geological storage in the southern North Sea;</li> <li>the Proposed PCC Site is a brownfield site which is considered more appropriate in general planning terms to redevelop for large scale power generation than a greenfield</li> </ul>	
		<ul> <li>one;</li> <li>the location of the Proposed PCC Site minimises interference with the Landscape and Creative Conservation Plan for Keadby 2 Power Station and specifically, the Habitat Management Areas secured via Conditions 31-34 inclusive of the Section 36</li> </ul>	



Generic Impact	Summary	Assessment	Emerging NPS
		consent for Keadby 2 Power	
		Station;	
		the Proposed PCC	
		Site provides sufficient	
		space to accommodate the	
		required scale of power	
		generation and carbon	
		capture infrastructure (in	
		particular, a single high	
		efficiency CCGT unit and a	
		CCP), without encroaching	
		on the exclusion areas for	
		the Keadby Wind Farm	
		turbines to the north and the	
		existing overhead lines to the south and east;	
		• the Proposed PCC Site (and the majority of the	
		Proposed Development Site)	
		is wholly in the ownership of	
		the Applicant; and	
		<ul> <li>the Proposed PCC</li> </ul>	
		Site is located in close	
		proximity to the existing	
		Keadby 1 and proposed	
		Keadby 2 Power Stations,	



Generic Impact	Summary	Assessment	Emerging NPS
		providing opportunities for synergies, efficiencies and thus economic and environmental benefits for the Proposed Development.	
		Therefore, no notable or significant impacts are anticipated and therefore the tests set out in the NPS have been satisfied.	
		It is therefore considered that the Proposed Development is in conformity with EN-1.	
Noise and vibration (EN-1, 5.11; EN-2, 2.7; EN-4, 2.20; and EN-5, 2.9)	development that is likely to cause noise impacts	Chapter 9 'Noise and Vibration' of the ES Volume I (Application Document Ref. 6.2.9) addresses the potential noise and vibration effects resulting from the Proposed Development on local Noise Sensitive Receptors (NSR). Impacts	EN-1 — policy remains largely unchanged. Paragraph 5.12.8 expands on guidance for mitigating noise, stating that if the Proposed development should address the effect of underwater or



Generic Impact	Summary	Assessment	Emerging NPS
	<ul> <li>Paragraph 5.11.8 of EN- 1 requires demonstration of good design through selection of the quietest cost-effective plant available; containment of noise within buildings wherever possible; optimisation of plant layout to minimise noise emissions and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission.</li> <li>Paragraph 5.11.9 goes on to state that developments should:</li> <li>avoid significant adverse impacts on health and quality of life from noise; mitigate and minimise other adverse impacts on</li> </ul>	operation (including maintenance) and decommissioning of the Proposed Development are assessed. The location of potential noise sensitive receptors ('NSRs') in proximity to the Proposed Development Site boundary has been considered when assessing the effects associated with noise and vibration levels from the construction, operational (including	required Noise Assessment. Furthermore, Paragraph 5.12.9 adds the requirement for development to be undertaken in accordance with statutory requirements for noise. Regard must be given to the relevant sections of the Noise Policy Statement for England, the NPPF, and the government's associated planning guidance on noise. The ES considers noise and vibration impacts on underwater ecological receptors. This is included in Chapter 11: Biodiversity and Nature Conservation (ES Volume I - Application Document Ref. 6.2) and accompanying Appendix 11H: Underwater Sound Effects on Fish (ES Volume II -



Generic Impact	Summary	Assessment	Emerging NPS
	health and quality of life from noise; and, where possible contribute to improvements to health and quality of life through the effective management and control of noise.	assuming the implementation of appropriate mitigation to reduce noise and vibration, are considered to be not significant due to the	6.3). There are no notable changes
	EN-2, Section 2.7 covers noise and vibration in relation to fossil fuel generating stations. Paragraph 2.7.2 confirms that the ES should include a noise assessment, while paragraph 2.7.3 states that the SoS should be satisfied that noise will be adequately mitigated through requirements. Furthermore, consideration should be given to the extent that	Biodiversity Management and Enhancement Plan ('LBMEP') (Application Document Ref. 5.10) sets out a number of development design and impact avoidance measures that would be employed to limit and mitigate noise and vibration effects. This includes the piling mitigation identified above, the selection of quiet plant to reduce noise emissions, the	



Generic Impact	Summary	Assessment	Emerging NPS
	operational noise will be	cladding, louvres / baffles	
	controlled by the EA.	that provide a suitable	
	EN 4 Section 2 20 deals	weighted sound reduction,	
	EN-4, Section 2.20 deals with the noise and	and the potential to design acoustically treated stacks	
	vibration effects of gas		
	supply pipelines.	cladding, louvres/ baffles,	
	Paragraphs 2.20.2-	silencers and air inlets to	
	2.20.3 note that there will	reduce tonal noise from the	
	be noise and possibly	and the second	
	vibration effects during		
	the construction phase	and the second	
	and also possibly during commissioning as a	and biodiversity protection management and	
	result of drying after		
	hydrotesting and using	in the draft DCO	
	air compressors. A new		
	gas pipeline (paragraph		
	2.20.4) may require an	'Control of noise and	
	above ground	vibration – construction' and	
	installation. These may		
	be located in quiet rural	noise – operation' control	
	areas and therefore the	require schemes to be	
	control of noise from these facilities is likely to	submitted and approved relating to the monitoring	
	be an important		



Generic Impact	Summary	Assessment	Emerging NPS
	consideration. Paragraph 2.20.7 outlines mitigation measures for pipelines and AGIs, including, amongst others:	vibration during construction, and the management and monitoring of noise during operation, respectively. There were no significant	
	screening or enclosure of compressors and pumps; use of sound attenuators on ventilation systems; acoustic lagging of	combined or cumulative	
	<ul> <li>pipework; and not impact piling such as auger boring.</li> <li>EN-5 (paragraph 2.9.11) requires relevant assessment methodologies to assess the noise impacts from the proposed electricity network infrastructure. It goes on to state that</li> </ul>	that, with appropriate mitigation, the Proposed Development is in conformity	



Generic Impact	Summary	Assessment	Emerging NPS
	mitigation measures that should be followed, including the positioning of lines to help mitigate noise through:		
	ensuring that the appropriately sized conductor arrangement is used to minimise potential noise; quality assurance through manufacturing and transportation to avoid damage to overhead line conductors which can increase potential noise effects; and ensuring that conductors are kept clean and free of surface contaminants		
	during stringing/installation.		



Generic Impact	Summary	Assessment	Emerging NPS
Socio-	Paragraph 5.12.1 of EN-	Chapter 16 'Socio-	There are no notable changes
economic	1 acknowledges that the	Economics' of the ES	to EN-1 in regard to socio-
(EN-1, 5.12)	construction, operation	Volume I (Application	
	and decommissioning of	Document Ref. 6.2.16)	assessment of the Proposed
	energy infrastructure	addresses the potential	Development remains
	may have socio-	effects of the construction,	<u>unchanged.</u>
	economic impacts at	operation (including	
	local and regional levels.	maintenance) and	
		decommissioning of the	
	Paragraph 5.12.3 states		
	that the assessment		
	within the ES should	businesses and the local	
	consider all relevant	population.	
	socio-economic impacts.		
		Based on the gross	
	Paragraph 5.12.6	construction worker	
	confirms that SoS will	requirements for	
	have regard to the		
	potential socio-economic		
	impacts of new energy	additionality factors outlined	
	infrastructure.	in Chapter 16, 1,076 net	
	Deve graph 5 12 0 states	construction jobs would be	
	Paragraph 5.12.9 states	generated, of which 538 are	
	that it should be	expected to be from the	
	considered whether		
	mitigation measures are	Area ('TTWA'). This is	



Generic Impact	Summary	Assessment	Emerging NPS
	necessary to mitigate any adverse socio- economic impacts of a development.	major beneficial (significant)	
		It is estimated that the total net employment for the Proposed Development is up to 130 employees. Of these, 110 are anticipated to be from the TTWA, and 20 outside the Scunthorpe TTWA.	
		The power generation and carbon capture elements of the Proposed Development are expected to operate for a minimum of 25 years. At the end of the expected design life, elements would be assessed for ongoing viability and, only if no longer viable, be decommissioned. It is therefore anticipated that, at the earliest, decommissioning of the	



Generic Impact	Summary	Assessment	Emerging NPS
		Proposed Development would be expected to commence at some point after 2051.	
		There is limited information available at this stage regarding decommissioning methods and timescales. As a worst-case scenario, this would result in similar impacts to the construction phase.	
		The people employed to decommission the Proposed Development would have an effect on the economy by spending their wages in the same way that those employed in the other stages. Overall, the decommissioning phase of the Proposed Development will have a minor (not significant) beneficial effect	



Generic Impact	Summary	Assessment	Emerging NPS
		on employment in the Wider Impact area.	
		No adverse effects have been identified during the construction or operation of the Proposed Development, and as such no mitigation is required.	
		Furthermore, the Proposed Development will connect into and indirectly enable the Zero Carbon Humber CCUS cluster, a 'Superplace' envisaged in the Energy White Paper where energy, CCUS and hydrogen technologies could agglomerate and generate significant numbers of jobs.	
		There were no significant combined or cumulative effects identified in ES Volume I (Cumulative and	



Generic Impact	Summary	Assessment	Emerging NPS
		CombinedEffects)(ApplicationDocumentRef. 6.2.19).Image: Complexity of the second sec	
		It is therefore considered that the Proposed Development is in conformity with EN-1.	
Traffic and transport (EN-1, 5.13; EN-2, 2.2.5- 2.2.6)	EN-1 (paragraph 5.13.3) states that if a proposed development is likely to have significant transport implications, the applicant's ES should include a transport assessment, using the NATA/WebTAG methodology stipulated in Department for Transport guidance, or any successor to such methodology. Applicants should also	'Traffic and Transport' (Application Document Ref. 6.2.10) addresses the potential effects of the Proposed Development on traffic and transport. A Transport Assessment is provided at ES Volume II Appendix 10A (Application Document Ref. 6.3.10). A	EN-1 and EN-2 do not feature any notable changes to the policy. Therefore, the assessment of the Proposed Development remains unchanged.



Generic Impact	Summary	Assessment	Emerging NPS
	England and highway authorities as appropriate on the assessment and	found at <b>Application</b>	
	mitigation.	Highways England were consulted on both rounds of	
	prepare a travel plan	Section 42 consultation and first replied to the initial round on 17 December 2020 with a number of comments. They responded again on 19	
	Paragraph 5.13.6 also requires applicants to include mitigation measures to sufficiently reduce the impact on transport infrastructure to acceptable levels.	issues raised, but requested sight of the Traffic Management Plan, Framework CWTP and final Transport Assessment prior	
	•	2021. Access to and from the Proposed Development Site	



Generic Impact	Summary	Assessment	Emerging NPS
	delivery and removal of construction materials, fuel, waste and equipment and for employees, while paragraph 2.2.6 notes that the Government supports the multi-modal transportation of materials by water or rail where possible.	construction site entrance for Keadby 2 Power Station, located off the A18. Prior to the main construction works commencing, an Early Preparation Works phase including the widening of the	
		During construction traffic movements will be controlled during the Proposed Development construction phase in order to minimise potential impacts on the surrounding road network, namely construction HGV arriving or departing the Proposed Development Site. As with the construction of Keadby 2 Power Station, a	



Generic Impact	Summary	Assessment	Emerging NPS
		TTRO is proposed to reduce speed on the A18 in the vicinity of the Proposed Development access from the A18.	
		In addition to the above, the Applicant would implement a range of good practice mitigation measures during the construction phase to minimise traffic impacts upon local highways, including:	
		• implementation of the CWTP which includes measures and procedures to encourage construction workers to adopt modes of transport which reduce reliance on single occupancy private car use. A Framework CWTP is included in the DCO	



Generic Impact	Summary	Assessment	Emerging NPS
_		Application as Application	
		Document Ref. No. 7.3;	
		liaison with the	
		appointed contractor for the	
		potential to implement	
		construction worker	
		minibuses and car sharing	
		options (considered as part	
		of the CWTP);	
		• implementation of the	
		CTMP to include measures	
		to control the routing and	
		impact of HGV on the local	
		road network during	
		construction. A routing plan	
		is provided within the Framework CTMP	
		(Application Document	
		<b>Ref. No. 7.2</b> ), which HGV	
		drivers would be required to	
		adhere to. The CTMP would	
		be secured by a	
		Requirement of the draft	
		DCO (Application	
		Document Ref. No. 2.1);	
		and	



Generic Impact	Summary	Assessment	Emerging NPS
		<ul> <li>during the commissioning (and operational) phase, working with suppliers to ensure that all relevant materials (including chemicals) bought to the Proposed Development Site that are classified as hazardous are transported in compliance with applicable regulations including the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (CDG Regs) (as amended). This will include, for example:</li> <li>consignments being marked with the familiar "Emergency Action Codes"; and</li> <li>including a telephone number for advice in the event of an emergency.</li> </ul>	



Generic Impact	Summary	Assessment	Emerging NPS
		No additional mitigation measures or enhancement measures. However, the Contractor will review options for the use of waterborne transport when sourcing construction materials.	
		The additional traffic due to Proposed Development construction activities would result in small, temporary increases of traffic flows, including HGV, on the roads leading to the Proposed Development Site. In line with the significance criteria presented herein and in the Appendix 10A (ES Volume II - Application Document Ref. 6.3), the effects of	
		construction traffic on all road sections and junctions are anticipated to be negligible and thus not	



Generic Impact	Summary	Assessment	Emerging NPS
		significant. Notwithstanding this, a number of traffic management measures, as outlined above, would be implemented during the Proposed Development construction phase to minimise traffic impacts upon the local road network. The generation of traffic during Proposed Development operation	
		would be minimal when compared to the construction phase. Therefore, Proposed Development operational phase traffic effects are also considered to be negligible and thus not significant.	
		The generation of traffic during the decommissioning phase is expected to involve traffic movements	



Generic Impact	Summary	Assessment	Emerging NPS
		associated with the removal (and recycling, as appropriate) of material arising from demolition and potentially the import of materials for land restoration and re-instatement. However, the effects of decommissioning traffic would be no greater than that of the construction traffic and are, therefore, anticipated to be negligible and thus not significant. Notwithstanding, a DTMP would be implemented during the decommissioning phase to control the impact and routing of HGV.	
		Measures relating to traffic and transport are secured in Schedule 2 of the draft DCO (Application Document Ref. 2.1) by Requirement 8 'Highway accesses',	



Generic Impact	Summary	Assessment	Emerging NPS
		Requirement 18 'Protection of highway surfaces', 	



Generic Impact	Summary	Assessment	Emerging NPS
		It is therefore considered that the Proposed Development is in conformity with EN-1 and EN-2.	
Waste management (EN-1, 5.14)	Section 5.14 of EN-1 acknowledges that all large infrastructure Proposed Developments are likely to generate hazardous and non- hazardous waste. Paragraph 5.14.6 requires applicants to produce a Site Waste Management Plan ('SWMP') and states that the applicant should seek to minimise the volume of waste produced and the volume of waste sent for disposal.	Framework CEMP (Application Document	NPS as it retains its gucaneofocus o-n minimising disposal. However, Paragraph 5.15.7 adds that "applicants are encouraged to source materials from recycled or reused sources and use low carbon materials, sustainable sources and local suppliers. Construction best practices should be used to ensure that material is reused or recycled onsite where possible".



Generic Impact	Summary	Assessment	Emerging NPS
	Paragraph 5.14.6 states the SoS should be satisfied that: waste will be properly managed, both on and off site; can be dealt with appropriately by the available waste infrastructure; and adequate steps have been taken to minimise the volume of waste.	CEMP, which allows for waste streams to be estimated and monitored and goals set with regards to the waste produced. The SWMP will require that the contractor segregates waste streams on-site, prior to them being taken to a waste facility for recycling or disposal. All waste removal	Chapter 5: Construction Programme and Management of the Environmental Statement – Volume I (Document Ref. 6.2) states the reuse of excavated materials from construction will be detailed in a Materials Management Plan developed in accordance with relevant guidance including 'The Definition of Waste: Development Industry Code of Practice' (CL: AIRE, 2011), an environmental permit or a relevant exemption. More details on the re-use of materials are detailed in the
		that the Proposed	



Generic Impact	Summary	Assessment	Emerging NPS
		Development is in conformity with EN-1.	Furthermore, details on Storage of Construction Plant and Materials can be found in Paragraph 5.4.68 in Chapter 5: Construction Programme and Management of the Environmental Statement – Volume I (Document Ref. 6.2). Accordingly, the assessment of the Proposed Development is unchanged.
Water quality and resources (EN-1, 5.15; EN-2, 2.10; and EN-4 2.22)	states that, where a Proposed Development is likely to have effects on water quality and	Environment and Flood Risk) of ES Volume I (Application Document Ref. 6.2.12) provides an assessment of likely significant effects on the water environment and flood risk as a result of construction, operational and decommissioning	EN-1 is similar to the previous but provides additional commentary on managing surface water run-off and pollution to groundwater beyond those outlined in Water Resource Management Plans. Paragraph 5.1.16 states that Applicants are encouraged to manage surface water during construction by treating surface water runoff from exposed topsoil prior to discharging and



Generic Impact	Summary	Assessment	Emerging NPS
	Developmentshave regard to the River Basin Management Plans and meet the requirement of 	All residual effects during construction and operation of the Proposed Development have been identified as neutral to slight adverse (not significant), provided that the embedded mitigation measures set out in Chapter 12 are implemented. Requirements 12 'Surface water drainage of Schedule 2 of the draft DCO (Application Document Ref. 2.1) secures details of temporary surface water and drainage systems, including means of pollution control for	to limit the discharge of suspended solids such as carparks, during operation. EN-5 adds commentary emphasising the duty for infrastructure to reduce Flood impacts on important services and the wider community. Chapter 12 (Water Environment and Flood Risk) of ES Volume I (Application Document Ref. 6.2.12) provides appropriate protective measures to address surface water run off both during construction and operation. Furthermore, the effects of flooding on important services
	EN-2 (paragraphs 2.2.7 - 2.2.9) notes that generating stations, in particular coal-fired stations, have very high- water demands, which	Proposed Development in accordance with the Construction Environment Management Plan (CEMP).	



Generic Impact	Summary	Assessment	Emerging NPS
	means that preferred site	Requirement 17.	Accordingly, the assessment of
	locations are likely to be		the Proposed Development
	coastal or alongside		remains unchanged.
	large rivers to extract		
	sufficient water.	of the draft DCO	
		(Application Document	
	EN-4, Section 2.22		
	deals with water quality	· · · · · · · · · · · · · · · · · · ·	
	and resources relating to		
	gas supply pipelines. It	•	
	notes (paragraph 2.22.2)		
	that the construction of		
	pipelines creates		
	corridors of surface		
	clearance and		
	excavation that can	The Proposed PCC Site will	
	potentially affect		
	watercourses, aquifers,		
	water abstraction and		
	discharge points, areas		
	prone to flooding and		
	ecological receptors.		
	Pipeline impacts could		
	include inadequate or		
	excessive drainage,	•	
	interference with		



Generic Impact	Summary	Assessment	Emerging NPS
	groundwater flow pathways, mobilisation of contaminants already in the ground, the introduction of new pollutants, flooding, disturbance to water ecology, pollution due to silt from construction and disturbance to species and their habitats. Impacts during construction should be avoided as far as possible through route selection or mitigated if unavoidable and ground should be reinstated after construction. Mitigation measures (paragraph 2.22.6) to protect the water environment may include techniques for crossing rivers and managing	Development and two water sources are under consideration; the Stainforth and Keadby Canal (Canal Water Abstraction Option) or the River Trent (River Water Abstraction Option - see Figure 3.2 (ES Volume III - <b>Application Document Ref.</b> <b>6.4</b> ). Only one of these options will be taken forward,	



Generic Impact	Summary	Assessment	Emerging NPS
	surface water before and after construction, including restoring vegetation and using sustainable drainage systems to control run- off.		





**6.4** National Policy Statements: Assessment and technology specific considerations

**6.4.1** The technology specific considerations of relevance to the Proposed Development that are contained within EN-2, EN-4 and EN-5 (and that have not already been addressed in Table 6.2 above) are considered in Table 6.3 below.







Generic Impact Summary		erations Assessment	Emerging NPS
	Currently (		<u></u>
Factors	EN-2, paragraph 2.2.2, notes that	Chapter 12 (Consideration of	EN-2 is similar in that it requires
influencing site		Alternatives) of ES Volume I	development the site to be big
selection by	large land footprints and will	(Application Document Ref.	enough to conform to government
developers (EN-	therefore only be possible where	6.2.6) sets out the alternatives that	policy on CCR and CCS.
2, 2.2, EN-4,	the applicant is able to acquire a	have been considered during the	However, it also adds that the site
2.19, & EN-5,	suitably sized site. The site will also	evolution of the Proposed	must also conform to government
2.2)	need to be big enough for CCS.	Development and design process.	policy on Decarbonisation
	Depending on the processes		<u>Readiness (DR).</u>
	(paragraph 2.2.3) fossil fuel	The Keadby Power Station site	
	generating station may require	has been selected by the	EN-5 retains the view that the
	storage and use of hazardous	Applicant for the development of a	location of new generating
	substances, which may have an	Low Carbon Gas Generating	stations or the system capacity
	impact on potential land use in the	Station, as opposed to other	
	vicinity. Development of a CHP	potentially available sites for the	determining factors of the location
	facility may also have implications for the size of site (paragraph	following reasons:	for new electricity networks.
	2.2.4).	the Proposed Development	However, Paragraph 2.2.2- 2. 2.3
	۲.۷.۳).	Site has excellent existing	states that applicants should
	EN-2, paragraph 2.2.5, states that	electrical grid, gas, water and	retain substantial control over the
	fossil fuel generating stations need	transport links, specifically the	routing and site selection of
	to be accessible for the delivery of	National Grid electricity and	electricity networks. Furthermore,
	construction materials, fuel, waste	natural gas transmission	it adds that the locational
	and equipment and for employees.	networks;	constraints identified above do
	Government policy encourages		not, of course, exempt Applicants
	multi-modal transport and materials	• the Proposed Development	from their duty to consider and
	may be transport by rail and water	Site is in close proximity to the	balance the site-selection
	where possible. This will however	ZCH Partnership cluster and	considerations set out in the NPS,

## Table 6.3: Assessment and Technology Specific Considerations



Generic Impact	Summary	Assessment	Emerging NPS
	be determined by the economics of	discussions with National Grid	much less the policies on good
	the proposed development	Ventures have determined that	design and impact mitigation
	(paragraph 2.2.6).	their proposed carbon dioxide	detailed in Sections 2.7-2.14
		pipeline can directly connect into	
	EN-2 (paragraphs 2.2.7 - 2.2.9)	the Proposed Development Site to	Therefore, the connection
	also highlights a number of matters	enable the transport of captured	between the initiating and
	relating to the demand that fossil	carbon dioxide from the Proposed	terminating points of a proposed
	fuel generating stations may place	Development to permanent	new electricity line need not go via
	on water resources and access to	geological storage in the southern	the most direct route, rather a
	water supplies.	North Sea;	route that considers engineering,
			environmental, and community
	EN-4 (paragraphs 2.19.7 - 2.19.10)	<ul> <li>the Proposed PCC Site is a</li> </ul>	<u>constraints.</u>
	sets out various considerations in	brownfield site which is	
	relation to site selection for gas	considered more appropriate in	The 400kV route (Work 3A) is very
	supply pipelines. Paragraphs	general planning terms to	short and passes directly from
	2.19.8 and 2.19.9 list examples of	redevelop for large scale power	Applicant controlled land to
	various land uses and engineering	generation than a greenfield one;	NGET's 400kV substation. The
	works which could be constraints.		132kV route (Work 3B) comprises
	These include proximity to existing	• the location of the	of two options, and DCO drafting
	and planned residential areas;	Proposed PCC Site minimises	provides that only one would be
	schools and hospitals; railway and	interference with the Landscape	constructed, both of which are
	road crossings; main river and	and Creative Conservation Plan	predominantly in previously
	watercourse crossings; and	for Keadby 2 Power Station and	developed land away from
	environmentally sensitive areas.	specifically, the Habitat	residential areas or environmental
	When choosing a pipeline route,	Management Areas secured via	designations.
	applicants should seek to avoid or minimise adverse effects from	Conditions 31-34 inclusive of the	



Generic Impact	Summary	Assessment	Emerging NPS
	<ul> <li>(paragraph 2.19.10). Where it is not possible to avoid below ground works mitigation measures may include protection or diversion of underground services, horizontal directional drilling ('HDD') and re- routing.</li> <li>EN-5 (paragraphs 2.2.1 - 2.2.7) sets out various considerations in relation to the selection of routes</li> </ul>	<ul> <li>the Proposed PCC Site provides sufficient space to accommodate the required scale of power generation and carbon capture infrastructure (in particular, a single high efficiency CCGT unit and a CCP), without encroaching on the exclusion areas for the Keadby Wind Farm turbines to the north and the existing overhead lines to the south and east;</li> <li>the Proposed PCC Site</li> </ul>	



Generic Impact	Summary	Assessment	Emerging NPS
		economic and environmental benefits for the Proposed Development.	
Pipeline Safety (EN-4, 2.19.4 - 2.19.6)	Pipelines need to comply with the Pipelines Safety Regulations 1996, which requires pipelines to be designed, constructed and operated so that the risks are as low as is reasonably practicable ('ALARP').	The various pipelines will be manufactured and installed so as to fully comply with relevant legislation including the Pressure Equipment (Safety) Regulations 2016 (HM Government, 2016a) and the Pipelines Safety Regulations (PSR) (HM Government, 1996) and all other relevant standards in order to that risks are ALARP.	No notable changes have been made to EN-4 regarding Pipeline Safety. Therefore, the assessment of the Proposed Development remains unchanged.
Soil and Geology (EN-4, 2.23)	Paragraphs 2.23.2 – 2.23.4 state that applicants should assess the stability of the ground conditions associated with the pipeline route and incorporate the findings of that assessment in the ES (see Section 4.2 of EN-1) as appropriate. The assessment should cover the options considered for installing the pipeline and weigh up the impacts	Chapter 13 (Geology, Hydrogeology and Land Contamination) of ES Volume I ( <b>Application Document Ref.</b> <b>6.2.13</b> ) addresses the potential effects of the construction, operation (including maintenance) and decommissioning of the Proposed Development on geology, hydrogeology and land contamination (considering effects	EN-4, 2.23 remains largely unchanged, but adds that in Mitigation, Applicants should include appropriate treatment of soil (and topsoil) during site construction and other infrastructure activity (and appropriate soil storage and reinstatement in line with the principles and practices outlined in the Agricultural Land



Generic Impact Summary	AS	sessment		Emerging NPS
Where the ap use HDD as th a pipeline up European Site impacts, the cover wheth conditions areWhen conside where the pip designated an geomorpholog applicant shot alternative ro bypass the reduce the through the de minimum poss why they were Applicants shot	pplicant proposes to be means of installing nder a National or assessment should er the geological suitable for HDD. The geological or beline goes under a rea of geological or ical interest, the uld submit details of butes, which either designated area or length of pipeline asignated area to the correlation discounted. Determine the reasons discounted of butes at an discounted of butes at an	ntamination and ential to cause cor sed on available nsultation carried	ntamination). e data and out with the Greater Partnership there are no ological Sites lly Important GS') at or in he Proposed Chapter 13 of potential nation. The these sites in Proposed s set out in found to be adoption of ed as part of a	guidelines on soil handling and restoration criteria and land quality.Chapter 3: The Site and Its Surroundings (ES Volume I - Application Document Ref. 6.2) outline the soil classification of the site, including the Agricultural Land Classification and appropriate mitigation measures have been proposed in the Soil Resources Plan (SRP) within the Framework CEMP (Application Document Ref. 7.1) to manage this resource. Controls will be via the final CEMP. Accordingly, the



Generic Impact	Summary	Assessment	Emerging NPS
		effects during construction, there may still be some temporary minor adverse effects during construction from ground disturbance or groundwater controls which may inadvertently mobilise contamination or create preferential pathways; in particular for groundwater and ground gas migration, which may cause a temporary adverse impact on groundwater quality or increased ground gas risk compared to the baseline risk.	
		With regards to permanent effects it is anticipated that if any remediation is carried out on potentially contaminated sites identified within the Proposed Development Site boundary, there will, in most instances, be overall beneficial effects. However, the risk and impact assessment has not considered these to be significant beneficial effects to ensure that a precautionary	



Generic Impact	Summary	Assessment	Emerging NPS
		approach is adopted. If required, (subject to ground investigation at the Proposed Development Site), site-specific permanent remediation measures, which will focus on source removal, pathway breakage or receptor protection, will be developed during the detailed design stage. If required, such measures will reduce risks to human health, controlled waters and/ or property from contamination, gas and vapours in the ground (the principal risks in this area), to an acceptable level.	
		It is anticipated that there will be no significant effects during the operation of the Proposed Development as maintenance and operation of the Proposed Development will be in accordance with the Environmental Permit Site Condition Report and relevant site protection and monitoring	



Generic Impact	Summary	Assessment	Emerging NPS
		programme (SPMP) arrangements therein.	
		It is anticipated that there may be some temporary minor adverse effects during the decommissioning period from ground disturbance. The CEMP to be secured by a requirement of the draft DCO ( <b>Application</b> <b>Document Ref. 2.1</b> ) will mitigate the potential for any risks that could otherwise result in significant adverse effects during decommissioning. Therefore, any temporary minor adverse effects would be no worse than those effects at the construction stage i.e. not significant.	
Electric and Magnetic Fields (EMFs) (EN-5, 2.10)	Paragraph 2.10.13 states the applicant should consider the following factors in relation to EMFs: height, position, insulation and protection (electrical or mechanical as appropriate) measures subject	ES Volume II Appendix 16A: Population and Health Signposting (Application Document Ref. 6.3.32) considers the potential effects of the Proposed Development on human	No notable changes have been made to EN-5 regarding EMFs. Therefore, the assessment of the Proposed Development is unchanged.



Generic Impact	Summary	Assessment	Emerging NPS
	to ensuring compliance with the Electricity Safety, Quality and Continuity Regulations 2002; that optimal phasing of high voltage overhead power lines is introduced wherever possible and practicable in accordance with the Code of Practice to minimise effects of EMFs; and any new advice emerging from the Department of Health relating to Government policy for EMF exposure guidelines.	Guidelines (International Commission on Non-Ionising Radiation Protection, 1988), the occupationally EMF-exposed population will consist of adults working at the Proposed Development Site who are generally exposed under known conditions and are trained to be aware of potential risk and to take	
	exposure guidelines.	Mitigation of any potentially significant effects on workers will be through the application of electromagnetic compatibility industry accepted practice. In accordance with good safety management principles, risks due to EMF from relevant sources including the substation and electrical connections will be reduced using the 'As Low As Reasonably Practicable' (ALARP) principle. Measures for the protection of workers from	



Generic Impact	Summary	Assessment	Emerging NPS
		potential EMF effects could therefore include risk assessment, engineering and administrative controls, personal protection programmes, and medical surveillance in accordance with the Control of Electromagnetic Fields at Work Regulations 2016 (HM Government, 2016) and relevant guidance. In particular, appropriate protective measures will be implemented if exposure in the workplace is predicted to result in the basic restrictions set out within ICNIRP Guidelines being exceeded.	



## 6.56.4 Marine Policy Statements

- 6.5.16.4.1 As noted earlier in this document, the Proposed Development does not affect the wider marine environment, and involves only temporary, and minor permanent, works in the tidal River Trent. These comprise the oversailing by mobile crane arms of the River Trent (Work 10B), and parts of Works 4B river abstraction option (which will only be developed if the canal abstraction option is not available, this being secured by a requirement in the draft DCO) and 5 (works to the existing cooling water outfall).
- 6.5.2<u>6.4.2</u> The UK Marine Policy Statement and East Inshore and East Offshore Marine Plans policies of relevance to the Proposed Development are considered in **Table 6.4** below.



Sse	For a better
Thermal	world of energy

Policy	Policy Document	Policy Text	Assessment
Paragraph 3.3.4	UK Marine Policy Statement	When decision makers are examining and determining applications for energy infrastructure and marine plan authorities are developing Marine Plans they should take into account:	3.3 of EN-1 states that there is an urgent need for new electricity infrastructure which should be
		<ul> <li>The national level of need for energy infrastructure, as set out in the Overarching National</li> </ul>	capacity and to help with the transition to low carbon electricity generation.
		Policy Statement for Energy (EN- 1) which applies in England and Wales, the National Planning Framework which applies in Scotland and the Strategic Energy Framework in Northern Ireland;	(Application Document Ref. 6.2.16) addresses the potential effects of the construction, operation (including maintenance) and decommissioning of the Proposed Development on employment local
		• []	Based on the gross construction worker requirements for construction of the Proposed
		<ul> <li>The positive wider environmental, societal and economic benefits of low carbon electricity generation and carbon capture and storage as key technologies for reducing carbon</li> </ul>	Development and the additionality factors outlined in Chapter 16, 1,076 net construction jobs would be generated. It is estimated that the total net employment for the Proposed Development is up to 130 employees
		dioxide emissions; • []	The Proposed Development consists of the development of a component on a CCS system

## Table 6.4: Compliance with Marine Policy Statements





		<ul> <li>The UK's programme to support the development and deployment of Carbon Capture and Storage (CCS) and in particular the need for suitable locations that provide for the permanent storage of carbon dioxide.</li> </ul>	which is to link into the ZCH Partnership export pipeline and gathering network for onward transport to the Endurance saline aquifer under the North Sea, the development of which will be applied for under a separate application.
Carbon Dioxide Capture and Storage – Potential Impacts	UK Marine Policy Statement	The deployment of carbon capture and storage technologies will bring significant benefits for the UK in enabling fossil fuel energy generation to be part of the UK's low carbon, secure energy future. It has been estimated that for CCS alone, the sector could be worth up to £3bn a year by 2030, sustaining up to 100,000 jobs86. The CCS Demonstration Programme also allows the UK to demonstrate leadership in deploying greenhouse gas emission mitigation techniques that will be vital in addressing the burgeoning energy requirements of developing economies. Removing carbon dioxide emissions from worldwide electricity generation will considerably reduce the potential for further acidification of the marine environment. Leakage from a properly selected storage site is extremely unlikely. Once injected into a formation, a number of physical and	Chapter 16 'Socio-Economics' of the ES Volume I (Application Document Ref. 6.2.16) addresses the potential effects of the construction, operation (including maintenance) and decommissioning of the Proposed Development on employment, local businesses and the local population. Based on the gross construction worker requirements for construction of the Proposed Development and the additionality factors outlined in Chapter 16, 1,076 net construction jobs would be generated. It is estimated that the total net employment for the Proposed Development is up to 130 employees. As mentioned above, this Application is not for the entire CCS chain and this Proposed Development does not include the Storage element. As such, it does not consider the potential leakage. The Proposed Development will connect into the ZCH Partnership export pipeline and gathering network for onward transport to the Endurance saline





		chemical trapping mechanisms will retain carbon dioxide within the formation. It is possible that leakage of carbon dioxide from the injection process could take place, for example through failure of infrastructure, such as pipelines and wellheads. This could have some localised impact on benthic marine communities and possibly cause minor localised seawater acidification. However, such impacts are unlikely to be either widespread or long-term, taking into account the dilution and buffering capacity of our oceans.	aquifer under the North Sea and the application for this export pipeline will consider such matters.
EC1	East Inshore and East Offshore Marine Plans	Proposals that provide economic productivity benefits which are additional to Gross Value Added currently generated by existing activities should be supported.	Chapter 16 'Socio-Economics' of the ES Volume I ( <b>Application Document Ref. 6.2.16</b> ) addresses the potential effects of the construction, operation (including maintenance) and decommissioning of the Proposed Development on employment, local businesses and the local population. The Proposed Development would provide economic productivity benefits which are additional to Gross Added Value currently generated by existing activities both through the production of clean energy and the through employment, as set out below.
EC2	East Inshore and East Offshore Marine Plans	Proposals that provide additional employment benefits should be supported, particularly where these benefits have the	Chapter 16 sets out how based on the gross construction worker requirements for construction of the Proposed Development and the additionality factors outlined in Chapter 16, 1,076 net



		potential to meet employment needs in localities close to the marine plan areas.	construction jobs would be generated. It is estimated that the total net employment for the Proposed Development is up to 130 employees.
SOC3	East Inshore and East Offshore Marine Plans	<ul> <li>Proposals that may affect the terrestrial and marine character of an area should demonstrate, in order of preference:</li> <li>a) that they will not adversely impact the terrestrial and marine character of an area</li> <li>b) how, if there are adverse impacts on the terrestrial and marine character of an area, they will minimise them</li> <li>c) how, where these adverse impacts on the terrestrial and marine character of an area cannot be minimised they will be mitigated against</li> <li>d) the case for proceeding with the proposal if it is not possible to minimise or mitigate the adverse impacts</li> </ul>	Chapter 14 'Landscape and Visual Amenity' of the ES Volume I ( <b>Application Document Ref. 6.2.14</b> ) addresses the potential effects of the construction, opening, operation (including maintenance) and decommissioning of the Proposed Development on landscape character (as a resource in its own right) and visual amenity. Views of the Proposed Development other than those assessed are acknowledged to exist. The viewpoints are not intended to provide an exhaustive or fully comprehensive catalogue of views of the Site, rather they provide a representative sample for the purpose of the landscape and visual amenity assessment, using viewpoints agreed with consultees. The assessment has determined that the Proposed Development is likely to result in a significant adverse effect on visual amenity during all assessment scenarios from viewpoints 1 (Chapel Lane West, Keadby), 2 (Gate Keepers Residence, Keadby) and 4 (PRoW (KEAD9, KEAD10) north of Keadby) and for the operation assessment scenario without Keadby 1 Power Station present for viewpoint 6 (Trunk Road, Keadby) as a result of the close distance to the



			Proposed Development Site and lack of intervening vegetation. Since it is considered that mitigation measures would not be effective in reducing this visibility, none are proposed. As such, the significant adverse effects will remain. However, the benefits of the Proposed Development are considered to outweigh the impacts on Viewpoints 1, 2, 4 and 6.
BIO1	East Inshore and East Offshore Marine Plans	Appropriate weight should be attached to biodiversity, reflecting the need to protect biodiversity as a whole, taking account of the best available evidence including on habitats and species that are protected or of conservation concern in the East marine plans and adjacent areas (marine, terrestrial).	ES Volume I Chapter 11 (Biodiversity and Nature Conservation) (Application Document Red. 6.2.6) finds that the Proposed Development has been sensitively designed and positioned to ensure no significant adverse residual construction, operation or decommissioning effects. Further information can also be found in Appendix 11F: Riparian Mammal Survey Report, Appendix 11G: Aquatic Ecology Survey Report and Appendix 11H: Underwater Sound Effects on Fish ( <b>Application Document Ref. 6.3</b> ).
BIO2	East Inshore and East Offshore Marine Plans	Where appropriate, proposals for development should incorporate features that enhance biodiversity and geological interests.	The Proposed Development includes provision for the creation of new wildlife habitats. The application is supported by a standalone Landscape and Biodiversity Management and Enhancement Plan ('LBMEP') ( <b>Application</b> <b>Document Ref. 5.10</b> ) which sets out biodiversity enhancement proposals and the habitat management and monitoring proposed to deliver



			these. It also confirms that the proposed enhancement measures are suitable to achieve no net loss and a net gain in biodiversity within the Proposed Development Site. It is proposed that submission and approval of the final LBMEP will be secured by a Requirement of the draft DCO ( <b>Application Document Ref. 2.1</b> ).
			The biodiversity enhancement measures proposed comprise:
			<ul> <li>creation of flower-rich native grassland;</li> </ul>
			<ul> <li>new species-rich native hedgerow plantings;</li> </ul>
			<ul> <li>enhancement of field drains for water voles and other aquatic biodiversity; and</li> </ul>
			installation of nest boxes for barn owl and other birds, habitat creation for willow tit, and installation of roosting boxes for bats.
CCS1	East Inshore and East Offshore Marine Plans	Within defined areas of potential carbon dioxide storage (This includes saline aquifers and suitable hydrocarbon fields) (mapped in figure 17) proposals should demonstrate in order of preference: a) that they will not prevent carbon	The Proposed Development will work by capturing carbon dioxide emissions from the gas-fired power station and connecting into the ZCH Partnership export pipeline, the development of which does not form part of this Application, and gathering network for onward transport to the Endurance saline aquifer under the North Sea. This
		<ul><li>dioxide storage</li><li>b) how, if there are adverse impacts on carbon dioxide storage, they will minimise them</li></ul>	demonstrates that the wider CCS aspirations for the ZCH are consistent with the MPS.



		<ul> <li>c) how, if the adverse impacts cannot be minimised, they will be mitigated</li> <li>d) the case for proceeding with the proposal if it is not possible to minimise or mitigate the adverse impacts</li> </ul>	
CCS2	East Inshore and East Offshore Marine Plans	Carbon Capture and Storage proposals should demonstrate that consideration has been given to the re-use of existing oil and gas infrastructure rather than the installation of new infrastructure (either in depleted fields or in active fields via enhanced hydrocarbon recovery).	As mentioned above, the Proposed Development consists of the capture of carbon dioxide emissions and will connect into the ZCH Partnership export pipeline which does not form part of this Proposed Development and therefore cannot demonstrate consideration being given to the re-use of existing oil and gas infrastructure. This will be considered in the application for the export pipeline.
CC1	East Inshore and East Offshore Marine Plans	<ul> <li>Proposals should take account of:</li> <li>how they may be impacted upon by, and respond to, climate change over their lifetime and</li> <li>how they may impact upon any climate change adaptation measures elsewhere during their lifetime</li> <li>Where detrimental impacts on climate change adaptation measures are identified, evidence should be provided as to how the proposal will reduce such impacts.</li> </ul>	ES Volume I Chapter 17 (Climate Change and Sustainability) (Application Document Ref. 6.2.17) provides information and considers the potential vulnerability of the Proposed Development to climate change and the potential effects of flooding in relation to the Proposed Development, including rising sea levels and tidal surge. The Chapter is supported by the Sustainability Review at ES Volume II Appendix 17A (Application Document Ref. 6.3.33). Impacts relating to flood risk can be found in ES Volume I Chapter 12 (Water Environment and Flood Risk) (Application Document Ref. 6.2.12), and ES Volume II Appendix 12A: Flood Risk Assessment and Appendix 12B: Water





			Framework Directive Assessment (Application Document Ref. 6.3).
			The draft DCO includes Requirements 12 'Surface Water drainage', 13 'Foul water drainage' and 14 'Flood risk mitigation' that require the submission of details for approval prior to the commencement of works on the relevant part of the Proposed Development relating to surface, foul water drainage and flood risk mitigation respectively.
			It is therefore considered that the Proposed Development would mitigate the effects of climate change, while its design would ensure that it is resilient to the future potential effects of climate change.
CC2	East Inshore and East Offshore Marine Plans	Proposals for development should minimise emissions of greenhouse gases as far as is appropriate. Mitigation measures will also be encouraged where emissions remain following minimising steps. Consideration (In responding to this policy, it may be useful to refer to processes set out in related guidance such that issued by Department for Energy And Climate	ES Chapter 8 (Air Quality) of ES Volume I ( <b>Application Document Ref. 6.2.8</b> ) addresses the potential air quality effects of the Proposed Development. Chapter 8 identified no significant residual effects relating to air quality, and ES Volume I Chapter 19 (Cumulative and Combined Effects) identified no significant residual cumulative or combined effects.
		Change including "Guidance on carbon neutrality" (2009), which describes matters such as how to define the scope of emissions.) should also be given to emissions from other activities or users	Furthermore, the Proposed Development features carbon capture technology which will help reduce CO2 emissions while generating energy and contributing to national targets.



		affected by the proposal (For example, through displacement.).	
PS3	East Inshore and East Offshore Marine Plans	<ul> <li>Proposals should demonstrate, in order of preference:</li> <li>a) that they will not interfere with current activity and future opportunity for expansion of ports and harbours (In identifying current activity and future opportunity for port or harbour expansion, it is important that applicants demonstrate that ports and harbours' reasoned representations be accounted for in proposals.)</li> <li>b) how, if the proposal may interfere with current activity and future opportunities for expansion, they will minimise this</li> <li>c) how, if the interference cannot be minimised, it will be mitigated</li> <li>d) the case for proceeding if it is not possible to minimise or mitigate the interference</li> </ul>	<ul> <li>(Appendix 12C (ES Volume II - Application Document Ref. 6.3)) has been prepared to accompany the application for the Proposed Development and describes the navigation baseline for the River Trent and measures to mitigate against navigational risks associated with the canal and river abstraction options. Canal abstraction is the preferred of the two, which is considered to be of lower risk in the NRA. With the application of mitigation, it is considered that all risks can be managed to a level which is As Low as is Reasonably Practical (ALARP).</li> <li>A 'Worst Credible Scenarios' approach has been used within the NRA to understand the location and nature of any navigational risks; a variety of mariners have been considered ranging from small unpowered "vessels" and recreational craft</li> </ul>





	and can be suitably managed by risk control protocols to reduce them to an acceptable level. The primary risk reduction measures proposed in the NRA are:
	<ul> <li>engagement and collaboration with ABP Humber and CRT to inform the final approach to marine works such that they have a minimal risk of disruption to the mariner;</li> </ul>
	<ul> <li>a suite of DML conditions, such as CEMP and method statement returns, to ensure that ABP Humber and other relevant stakeholders are informed on final proposals;</li> </ul>
	<ul> <li>additional DML conditions to ensure mariners are made fully aware of works such that they can plan safe passage; and</li> </ul>
	<ul> <li>'standard-set' DML marking, lighting and warning conditions to ensure any mariners are aware of the marine works.</li> </ul>
	Further detail of the Navigational Risk Assessment is provided in NRA. In EIA terms, the overall magnitude of impact is considered minor for the River Trent and the Stainforth and Keadby Canal. Both are high importance receptors for navigation,



			resulting in a slight adverse effect (not significant)						
			in	relation	to	navigational	risk	at	both
			watercourses.						



## 6.66.5 The National Planning Policy Framework ('NPPF')

- 6.6.16.5.1 Paragraph 5 of the NPPF explains that it may be considered to be a matter that is relevant for the purposes of assessing DCO applications. The EIA and other studies and designs undertaken for the Proposed Development will therefore have regard to the relevant policies of the NPPF as part of the overall framework of national policy.
- 6.6.2<u>6.5.2</u> Paragraph 7 of the NPPF is clear that the purpose of the planning system is to contribute to the achievement of sustainable development, summarised as "meeting the needs of the present without compromising the ability of future generations to meet their own needs". Paragraph 8 goes on to identify three dimensions to sustainable development: economic, social and environmental, which it states are interdependent and must be pursued in mutually supportive ways. It explains that these dimensions give rise to the need for the planning system to perform a number of key roles as follows:
  - An economic objective to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;
  - A social objective to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a welldesigned and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and
  - An environmental objective to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.
- 6.6.36.5.3 Central to the NPPF is 'a presumption in favour of sustainable development'. This is highlighted at Paragraph 11. For decision-making, this means approving applications that accord with the development plan without delay.
- 6.6.4<u>6.5.4</u> The NPPF is supportive of infrastructure projects. One of the methods of fulfilling the objective of sustainable development listed at paragraph 8a is through the "provision of infrastructure," with the important role that infrastructure should play highlighted in Chapter 3 (Plan-Making). Paragraph 175c states that development resulting in loss or deterioration of irreplaceable habitats should be refused unless there are wholly exceptional reasons, which footnote 58 suggests may include NSIP where the public benefit would clearly outweigh the loss or deterioration of habitat.





- 6.6.5.6.5.5 NPPF policies of particular relevance include building a strong, competitive economy, promoting sustainable transport, achieving well-designed places, meeting the challenge of climate change, flooding and coastal change, conserving and enhancing the natural environment and conserving and enhancing the historic environment.
- 6.6.6<u>6.5.6</u> The Proposed Development accords with these core land-use planning principles as follows:
  - it would contribute toward sustainable economic development by providing new low carbon electricity generating capacity, for which there is a confirmed need, thereby contributing to the security and diversity of energy supplies for businesses and homes;
  - the Design and Access Statement (Application Document Ref. 5.6) demonstrates that the Proposed Development is appropriate in terms of its context and setting and incorporates the principles of 'good design', while the ES demonstrates that it would not result in unacceptable impacts on the amenity of people living in the surrounding area;
  - the Proposed Development would support the transition to a low carbon future;
  - it has been designed to be resilient to flooding and would not increase the risk of flooding at the Site or elsewhere;
  - the ES demonstrates that the Proposed Development would conserve the natural environment and it includes measures to enhance landscaping and biodiversity at the Site, while it would not result in significant effects in terms of pollution;
  - much of the Site involved former or existing industrial, brownfield land;
  - while the assessment of traffic and transport in the ES for the Proposed Development is based on a worst-case scenario, it demonstrates the transport effects would be acceptable. The transport implications during operation will be very minor.

6.6.7<u>6.5.7</u> A summary of the NPPF policies of most relevance to the Proposed Development and how it complies with these is provided in Table 6.5 below.











## Table 6.5: NPPF Policies

NPPF Ref.	Policy Summary	Assessment
Chapter 6 Building a strong, competitive economy	Confirms that the Government is committed to securing economic growth and productivity and allowing each area to build on its strengths, counter any weaknesses and address the challenges of the future. Paragraph 81-81 82makes it clear that the planning system should do all it can to support sustainable economic growth though, amongst other measures,	The Proposed Development would support sustainable economic growth through the provision of electricity generating capacity, for which there is a confirmed need, enhancing the security and diversity of UK energy supplies. The provision of secure energy supplies that are resilient to potential supply disruptions is critical to economic growth. Chapter 16 'Socio-Economics' of the ES Volume I ( <b>Application Document</b> <b>Ref. 6.2.16</b> ) addresses the potential effects of the construction, operation (including maintenance) and decommissioning of the Proposed Development on employment, local businesses and the local population. Based on the gross construction worker requirements for construction of the Proposed Development and the additionality factors outlined in Chapter 16, 1.076 net expertmention in the generated. It is estimated that the total
	planning proactively and removing barriers to investment such as a lack of infrastructure.	<ul><li>1,076 net construction jobs would be generated. It is estimated that the total net employment for the Proposed Development is up to 130 employees.</li><li>It is therefore considered that the Proposed Development is in conformity with the NPPF.</li></ul>
Chapter 9 Promoting sustainable transport	Aimed at facilitating more sustainable transport choices so as to contribute to wider sustainability and public health objectives. Paragraph <u>108 110</u> <u>110</u> states that in assessing sites for applications it should	The main potential impact of the Proposed Development on transport will be during the construction phase, during which it is noteworthy that water freight is proposed for bringing AIL onto Site where possible. The assessment of traffic and transport in the ES is based on a worst-case scenario but demonstrates traffic and transport effects during construction will be acceptable and will not adversely impact on the highway network. The transport effects during operation would be limited. The Applicant has



	be ensured appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, safe and suitable access to the site can be achieved for all users and any significant impacts from the development on the transport network or on highway safety can be cost effectively mitigated to an acceptable degree. Paragraph 111-113 states that all developments that generate significant amounts of movement should be supported by a transport statement or assessment and these should consider the opportunities to make use of sustainable transport modes.	submitted a framework CTMP (Application Document Ref. 7.2) and CWTP (Application Document Ref. 7.3) and these include measures to manage and minimise transport impacts during construction. The Final CTMP and CWTP will be secured by Requirements 25 and 26 of Schedule 2 in the draft DCO (Application Document Ref. 2.1) respectively. It is therefore considered that, with appropriate transport management, the Proposed Development is in conformity with the NPPF.
Chapter 11 Making effective use of land	Aimed at promoting the effective use of land, including by (paragraph <u>118c_120c</u> ) giving substantial weight to the use of suitable brownfield land.	<ul> <li>The Site has been selected by the Applicant for the Proposed Development, as opposed to other potentially available sites, for the following reasons:</li> <li>absence of major structures requiring demolition, treatment and removal on the Proposed PCC Site;</li> <li>use of the Proposed PCC Site minimises interference with the Landscape and Creative Conservation Plan for Keadby 2 Power</li> </ul>



		<ul> <li>Station. It also avoids areas of highest biodiversity value within the wider Keadby Power Station site;</li> <li>sufficient space is available within the Proposed PCC Site to accommodate the power generation and carbon capture equipment, without encroaching on the exclusion areas for the Keadby Wind Farm turbines to the north and the existing overhead lines to the south and east;</li> <li>the Proposed PCC Site enables connections to be developed to existing electrical, gas and, in the future, carbon dioxide pipeline infrastructure; and</li> <li>adequate supplies of cooling water can be provided via the nearby Stainforth and Keadby Canal or River Trent, whilst existing infrastructure for discharge of the treated effluent into the River Trent can also be utilised.</li> <li>A more detailed description of the Site is provided in ES Volume I Chapter 3 (Description of the Site) (Application Document Ref. 6.2.3) and information on Alternative Sites is provided in Chapter 6 (Consideration of Alternatives) (Application Document Ref. 6.2.6).</li> <li>It is therefore considered that the Proposed Development is in conformity with the NPPF.</li> </ul>
Chapter 12 Achieving well- designed places	Deals with the matter of design in the built environment. Paragraph <u>124–126</u> confirms that the Government attaches great importance to good design which is a key aspect of sustainable development.	The Design and Access Statement ( <b>Application Document Ref. 5.6</b> ) sets out how KGL has had regard to design and access considerations in designing the Proposed Development. The document explains how the Site's context, wider setting and planning policy has been taken into account in the design of the Proposed Development.



	Paragraph <u>128-132</u> goes on to state that design quality should be considered throughout the evolution of individual proposals and applicants should work closely with those affected.	<ul> <li>While flexibility has been sought in the design of the Proposed Development, the Applicant has defined design parameters upon which to base the EIA to ensure that the likely significant effects of the Proposed Development have been robustly assessed. The Applicant has also included appropriate articles and requirements within the DCO to ensure that the detailed design of the Proposed Development is controlled and secured.</li> <li>The final design of the Proposed Development, notably the PCC Site, is functional, reflecting its purpose and the context within which it will sit. In terms of siting and layout, the main buildings and structures are set well within the plot and have been grouped together where feasible from a technical and safety perspective to consolidate the built form.</li> <li>The design of the Proposed Development will be secured via Requirements 5 'Detailed design' and 6 'Landscaping and biodiversity protection management and enhancement' in Schedule 2 of the draft DCO (Application Document Ref. 2.1).</li> </ul>
		It is therefore considered that the Proposed Development is in conformity with the NPPF.
Chapter 14 Meeting the challenge of climate change, flooding and coastal change	Focuses upon adapting to and mitigating the effects of climate change. Paragraph 151 152highlights that planning plays a key role in helping shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing	The Proposed Development incorporates a number of measures within its design to ensure that it will be resilient in terms of the effects of climate change as well as contributing to mitigating those effects. For example, as set out in ES Volume I Chapter 12 (Water Environment and Flood Risk), the Proposed Development will not be at risk of flooding nor increase the risk of flooding elsewhere. Furthermore, ES Volume I Chapter 17 (Climate Change and Sustainability) confirms that the Proposed Development will not result in significant climate changes effects.



	resilience to the impacts of	
	climate change, and supporting	
	the delivery of renewable and	
	low carbon energy.	
	Paragraph <u>155-159</u> warns that	
	inappropriate development in	
	areas at risk of flooding should	
	be avoided but where it is	
	necessary the development	
	should be made safe for its	
	lifetime without increasing flood	
	risk elsewhere. If it is not	
	possible for development to be	
	located in zones with a lower	
	risk of flooding the exception	
	test may have to be applied.	
Chapter 15	Aimed at protecting and	The Environmental Statement Volume II (Application Document Ref. 6.2)
Conserving and	enhancing value landscapes,	confirms that the Proposed Development will not result in unacceptable
enhancing the	recognising the intrinsic	impacts on the natural environment, covering topics including air quality,
natural	character and beauty of the	biodiversity and nature conservation, geology, hydrogeology and land
environment	countryside, and the wider	contamination, and landscape and visual amenity. Neither would it result in
	benefits from natural capital,	significant effects upon the health or amenity of people living within the
	minimising impacts on and	locality of the Site.
	where possible providing net	In addition, a standalana Landasana and Diadiyaraity Managament and
	gains for biodiversity and	In addition, a standalone Landscape and Biodiversity Management and
	preventing new and existing	Enhancement Plan (LBMEP) is provided as <b>Application Document Ref.</b>
	development from contributing	<b>5.10</b> of the DCO Application. This sets out biodiversity enhancement
	to, being put at risk from or	proposals and the habitat management and monitoring proposed to deliver



	being adversely affected by unacceptable levels of soil, air, water or noise pollution and land instability.	these. It also confirms that the proposed enhancement measures are suitable to achieve no net loss and a gain in biodiversity within the Proposed Development Site. It is proposed that submission and approval of the final LBMEP will be secured by a Requirement of the draft DCO ( <b>Application</b> <b>Document Ref. 2.1</b> ).
		The biodiversity enhancement measures proposed comprise:
		<ul> <li>creation of flower-rich native grassland;</li> <li>new species-rich native hedgerow plantings;</li> <li>enhancement of field drains for water voles and other aquatic biodiversity; and</li> <li>installation of nest boxes for barn owl and other birds, habitat creation for willow tit, and installation of roosting boxes for bats.</li> </ul>
		It is therefore considered that the Proposed Development is in conformity with the NPPF.
Chapter 16 Conserving and enhancing the historic environment	Seeks to conserve heritage assets so that they can be enjoyed for their contribution to the quality of life of existing and future generations (paragraphs 184-202189-208). Paragraph 189-194 states that where a development proposal includes, or has potential to	Due to the scale of the Proposed Development, it is envisaged that opportunities to provide effective landscape screening will be limited. Therefore, the residual effects of the Proposed Development in relation to impacts resulting from change to the setting of designated and non- designated heritage assets will be the same as those reported under construction phase effects for the majority of assets. These effects were not significant.
	include, heritage assets with archaeological interest, local planning authorities should	A significant effect on the Isle of Axholme Area of Special Historic Landscape Area has been assessed. The impact arises from the presence of the Proposed Development in combination with the existing Keadby 1 Power



an	sessment and, where cessary, a field evaluation.	Station, Keadby 2 Power Station (under construction) and Keadby Windfarm in distant views from the asset and through views of the proposed permanent gatehouse north of the proposed site access from the A18. With regard to the latter structure, due to its small size, it is possible to effectively screen the structure in views from the Isle of Axholme Area of Special Historic Landscape Interest, or to provide bespoke design solutions for the cabin to minimise harm. This should reduce the potential impact of the Proposed Development to very low, on this asset of high value, resulting in a residual minor adverse effect, which is not significant.
		The magnitude of impact for the loss of the possible partial enclosures [AECOM3333] and [AECOM3334] as a consequence of the Proposed Development has been assessed as high, resulting in a major adverse effect, which is significant. Proposals for appropriate recording of archaeological remains prior to and during construction through archaeological evaluation and mitigation. This would allow any below ground archaeological remains to be preserved by record. This would reduce the magnitude of impact on individual assets, resulting in a residual minor adverse effect, which is not EIA significant.



## 6.76.6 Local Planning Policy

- 6.7.16.6.1 **Table 6.6** below considers the compliance of the Proposed Development with the relevant statutory development plan policies.
- <u>6.6.2</u> Given that EN-1, EN-2, EN-4 and EN-5 provide the primary basis upon which any decision on the Application should be made, combined with the fact the matters covered by these local planning policies have for the most part already been considered in detail above in relation to the NPSs, in general a summarised response has been made to each policy.





Policy	Policy Document	Policy Text	Assessment
Spatial Objective 1 – An Area Wide Renaissance	Core Strategy	To deliver area wide renaissance in North Lincolnshire which creates a step change in the area's role both regionally and nationally and creates a high quality of life for the area's residents, with Scunthorpe providing the sub-regional focus for development supported by the market towns of Barton upon Humber, Brigg, Crowle, Epworth, Kirton in Lindsey and Winterton.	The Proposed Development will individually have major beneficial socioeconomic effects, providing construction employment and directly creating jobs in close proximity to Scunthorpe, as set out in Environmental Statement Volume I Chapter 26 (Socio- economics) ( <b>Application Document Ref.</b> <b>6.2.16</b> ). The Proposed Development will connect into and indirectly enable the Zero Carbon Humber CCUS cluster, a 'Superplace' envisaged in the Energy White Paper where energy, CCUS and hydrogen technologies could agglomerate and generate significant numbers of jobs. ZCH is a transformational form of infrastructure development capable of creating the step change that Strategic Objective 1 envisages.
Spatial Objective 4 – Creating Greater Economic Success	Core Strategy	To create a strong, competitive and diverse economy by encouraging business growth and employment opportunities supported by the delivery of strategic employment sites and improvement of the range and level of skills by developing a higher	The Proposed Development is consistent with creating a strong, competitive and diverse economy by providing both construction and operational employment in an area with an established history of energy generation and the potential for clustering of



Policy	Policy Document	Policy Text	Assessment
		education sector	high skilled jobs, as set out in Environmental Statement Volume I Chapter 26 (Socio- economics) ( <b>Application Document Ref.</b> <b>6.2.16</b> ).
Spatial Objective 6 – Protecting and Enhancing The World Class Environment	Core Strategy	To conserve and enhance our world class environments of the Humber Estuary and Crowle Moors and improve our other natural, historic and built landscapes as well as guiding changes in a way which reduces and takes proper account of environmental impact, climate change and sea level rise.	As set out in various chapters of the Environmental Statement Volume I (Application Document Ref. 6.2) and the Landscaping and Biodiversity Management and Enhancement Plan (Application Document Ref. 5.10), secured via a requirement in the Draft DCO, the Proposed Development will conserve and enhance the local natural, historic and built landscapes, mitigate and adapt to the effects of climate change, and make positive steps toward tackling climate change.
Spatial Objective 7 – Efficient Use and Management of Resources	Core Strategy	To ensure the efficient use of resources, maximising recycling of minerals and waste products, minimising pollution, maintaining and improving air, soil and water quality, and employing sustainable building practices in new development.	Various chapters of Environmental Statement Volume I ( <b>Application</b> <b>Document Ref</b> ) set out the environmental impacts of the Proposed Development and how pollution is minimised and how resources are to be used efficiently. The Proposed Development will operate highly efficiently in terms of resource use and



Policy	Policy Document	Policy Text	Assessment
			will capture a very high proportion of its
			carbon dioxide emissions for compression
			and transport to a storage site (outwith the
			DCO consent) and will be operated in
			accordance with an Environmental Permit.
			In terms of construction resource use a
			range of measures including a site waste
			management plan will apply as part of the
			Construction Environmental Management
			Plan, production of which is secured by a
			DCO requirement. In addition the Proposed
			Development is largely located on brownfield
			land and makes extensive use of existing
			infrastructure such as the existing National
			Grid 400kV substation adjacent, the existing
			gas NTS connection, existing cooling water
			discharge pipeline, existing tracks accessing
			the A18 and Chapel Lane, and two existing
			construction facilities (the 'Pilfrey laydown
			area' and the 'haul road') are being utilised
			for the Keadby 2 Power Station project. Each
			of these temporary construction facilities are
			subject to a dedicated extant planning
			permission (the 'Pilfrey laydown planning
			permission' and the 'haul road planning
			permission' respectively). Decision notices



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			for these are provided in the appendices of this Planning Statement. These facilities are to be retained for use by the Proposed Development then the land subsequently restored, rather than the land restored only to be developed once more for the same facility. The Proposed Development therefore will minimise resource use by retaining these facilities for an appropriate time period in accordance with all other controls on their existing planning permissions, which have been reflected in similarly worded requirements included in Schedule 2 of the Draft DCO, which reference approved material from the extant planning permissions, as provided in the Haul Road Plans ( <b>Application Document Ref. 4.19</b> ) and the Pilfrey Laydown Plans ( <b>Application Document Ref. 4.20</b> ). These are listed as certified documents in Schedule 12 of the draft DCO. In addition, Article 38 of the draft DCO requires the Applicant to restore the land comprised in these two facilities in the event that the DCO is made but not implemented.



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Spatial Objective 10 – Creating A Quality Environment	Core Strategy	To transform North Lincolnshire's image by ensuring that all new development exhibits a high standard of design and architectural quality that respects and enhances the distinctive landscapes and townscapes of North Lincolnshire's towns and villages.	The Proposed Development is consistent with the aims of this policy. While it is not possible to prevent all impacts upon visual amenity, as identified in the assessment against NPS EN-1, 5.9 and EN-2 2.6 in <b>Table 6.2</b> of this report, the Proposed Development will exhibit a high standard of design that respects the landscape so far as possible for the scale and type of infrastructure proposed. A design evolution process has been set out in the Design and Access Statement ( <b>Application Document Ref.</b> <b>5.6</b> ) and has minimised the use of greenfield land, and design mitigation is set out in the Landscaping and Biodiversity Management and Enhancement Plan ( <b>Application Document Ref. 5.10</b> ) (with further measures set out in the Design and Access Statement, <b>Application Document Ref.</b> <b>5.6</b> )) which are secured by Requirements in Schedule 2 of the Draft DCO ( <b>Application Document Ref. 2.1</b> ). The maximum parameters of key structures within <b>Work No. 1</b> , as well as the gatehouse in the more rural landscape near the A18 ( <b>Work No. 8B</b> ),



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			are specifically controlled in Schedule 11 of the Draft DCO.
CS1 – Spatial Strategy for North Lincolnshire	Core Strategy	<ul> <li>The spatial vision and the future development requirements will be delivered through the spatial strategy for North Lincolnshire as outlined below and on the key diagram.</li> <li>The spatial strategy will focus on: <ul> <li>a. Delivering an urban renaissance in Scunthorpe and supporting its role as a major subregional town.</li> </ul> </li> <li>Scunthorpe will be the focus for the majority of new development and growth, including housing, employment, retail, sustainable transport links, and higher order services and facilities to serve North Lincolnshire.</li> <li>()</li> <li>Opportunities for economic development will be provided within existing established employment locations as well as on additional sites. ()</li> </ul>	The Proposed Development is consistent with the spatial strategy as it constitutes a form of economic development at an existing established employment site, and will be located largely on previously used land and making use of existing structures and infrastructure, consistent with the spatial strategy policy on rural development. It is located in an area already characterised by substantial power infrastructure including overhead lines, wind turbines and two power stations, therefore is not out of keeping with local character. Design mitigation is set out in the Landscaping and Biodiversity Management and Enhancement Plan ( <b>Application Document Ref. 5.10</b> ) (with further measures set out in the Design Principles Statement (Appendix 1 of the Design and Access Statement, <b>Application Document Ref. 5.6</b> )) which are secured by Requirements in Schedule 2 of the Draft DCO ( <b>Application Document Ref. 2.1</b> ).The Proposed Development will have major beneficial socio-economic effects I, as set



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		<ul> <li>()</li> <li>Small and medium scale employment opportunities will be encouraged to meet the need to provide local jobs. The retention of existing local employment sites will be supported and where appropriate additional land will be allocated. Around 10 hectares of employment land will be provided in the market towns, with the majority being focussed in Barton upon Humber and Brigg.</li> <li>()</li> <li>Supporting thriving rural communities and a vibrant countryside through the protection and enhancement of local services, creating opportunities for rural economic diversification and the promotion of tourism.</li> <li>Rural settlements will be supported as thriving sustainable communities, with a strong focus on retaining and enhancing existing local services to meet local needs. Development will be limited and should take into account levels of local service</li> </ul>	out in ES Volume I Chapter 16 (Socio-



Policy Policy Document	Policy Text	Assessment
	<ul> <li>provision, infrastructure capacity and accessibility. Any development that takes place should be in keeping with the character and nature of the settlement.</li> <li>In the countryside, support will be given to development that promotes rural economic diversification and small-scale employment opportunities, particularly on previously used land or in existing rural buildings. Tourism development will also be supported, in particular the development of green tourism making the most of the area's important natural and built environments.</li> <li>()</li> <li>North Lincolnshire's townscapes and historic landscapes will also be protected and enhanced and high quality design encouraged. In particular, the nationally significant historic landscapes of the Isle of Axholme and Crowle Moors will be conserved and their potential as a tourist and educational resource</li> </ul>	



Policy	Policy Document	Policy Text	Assessment
		realised. The character and landscape setting of the area's historic market towns will be safeguarded (especially Barton upon Humber, Crowle and Epworth) and the rich archaeological heritage of North Lincolnshire will be preserved and enhanced. The value of regionally and locally important sites will be enhanced and opportunities to improve green infrastructure will be included in all new development.	
		All future growth regardless of location should contribute to sustainable development in particular in respect of those criteria set out in policy CS2 as well as the other policies of the plan. All change will be managed in an environmentally sustainable way by avoiding/minimising or mitigating development pressure on the area's natural and built environment, its existing utilities and associated infrastructure and areas at risk of flooding. Where development unavoidably has an environmental impact adequate mitigation measures should be used for the development to be acceptable.	



Policy	Policy Document	Policy Text	Assessment
CS2 – Delivering More Sustainable Development	Core Strategy	<ul> <li>In supporting the delivery of the spatial strategy set out in policy CS1, as well as determining</li> <li>how future development needs will be met in North Lincolnshire, a sequential approach will be</li> <li>adopted. Development should be focused on: <ol> <li>Previously developed land and buildings within the Scunthorpe urban area, followed by other suitable infill opportunities within the town, then by appropriate greenfield urban extensions</li> <li>Previously developed land and buildings within the defined development limits of North Lincolnshire's Market Towns, followed by other suitable infill opportunities then appropriate small scale greenfield extensions to meet identified local needs</li> </ol> </li> </ul>	The Proposed Development, being power generation, would be unsuitable within the development boundaries of Scunthorpe or one of North Lincolnshire's market towns. All land required for the Proposed Development has been carefully chosen for operational and technical reasons. The Proposed Development also makes appropriate use of previously developed land and existing infrastructure such as the existing National Grid 400kV substation adjacent, the existing gas NTS connection, existing cooling water discharge pipeline, existing tracks accessing the A18 and Chapel Lane, and two existing construction facilities.



Policy	Policy Document	Policy Text	Assessment
		settlements to meet identified local needs.	
		Any development that takes place outside the defined development limits of settlements or in rural settlements in the countryside will be restricted. Only development which is essential to the functioning of the countryside will be allowed to take place. This might include uses such as that related to agriculture, forestry or other uses which require a countryside location or which will contribute to the sustainable development of the tourist industry.	
		A 'sequential approach' will also be applied to ensure that development is, where possible, directed to those areas that have the lowest probability of flooding, taking account the vulnerability of the type of development proposed, its contribution to creating sustainable communities and achieving the sustainable development objectives of the plan. Where development does take place in the flood plain, mitigation measures should be applied to ensure that the development is safe.	



Policy	Policy Document	Policy Text	Assessment
		<ul> <li>All future development in North Lincolnshire will be required to contribute towards achieving sustainable development. Proposals should comply with the overall spatial strategy together with the following sustainable development principles:</li> <li>Be located to minimise the need to travel and to encourage any journeys that remain necessary to be possible by walking, cycling and public transport. It should be compliant with public transport accessibility criteria as set out in the Regional Spatial Strategy</li> <li>Be located where it can make the best use of existing transport infrastructure and capacity, as well as taking account of capacity constraints and deliverable transport improvements particularly in relation to junctions on the Strategic Road Network</li> <li>Where large freight movements are involved the use of rail and water transport should be maximised</li> </ul>	



Policy	Policy Document	Policy Text	Assessment
		<ul> <li>Contribute towards to the creation of locally distinctive, sustainable, inclusive, healthy and vibrant communities</li> <li>Contribute to achieving sustainable economic development to support a competitive business and industrial sector</li> <li>Ensure that everyone has access to health, education, jobs, shops, leisure and other community and cultural facilities that they need for their daily lives</li> <li>Ensure the appropriate provision of services, facilities and infrastructure to meet the needs of the development, but where appropriate it is to be recognised that a phased approach may not be required on small scale development proposals.</li> <li>To be constructed and operated using a minimum amount of non-renewable resources including increasing the use of renewable energy in construction and operation</li> <li>Take account of local environmental capacity and to improve air, water</li> </ul>	



Policy	Policy Document	Policy Text	Assessment
		<ul> <li>and soil quality and minimise the risk and hazards associated with flooding, and</li> <li>Be designed to a high standard, consistent with policy CS5, and use sustainable construction and design techniques.</li> <li>All change will be managed in an environmentally sustainable way by avoiding/minimising or mitigating development pressure on the area's natural and built environment, its existing utilities and associated infrastructure and areas at risk of flooding. Environmental impacts to or from development that cannot be avoided should be adequately mitigated for it to be acceptable.</li> </ul>	
CS3 – Development Limits	Core Strategy	<ul> <li>Development limits will be applied to the Scunthorpe urban area, the Market Towns and Rural Settlements. They will not be applied to rural settlements in the countryside.</li> <li>In applying development limits the following considerations will be taken into account: <ul> <li>Existing development patterns - the development limit will be drawn</li> </ul> </li> </ul>	The Proposed Development, being power generation, would be unsuitable within the development boundaries of Scunthorpe or one of North Lincolnshire's market towns. All land required for the Proposed Development has been carefully chosen for operational and technical reasons. The Proposed Development would be located at an existing established employment site in an area characterised by power generation and



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	<ul> <li>around the main built up area of the settlement. Scattered, sporadic or dispersed development or buildings separated from the main body of the settlement by areas of undeveloped land, roads or industrial areas will not be included. Where possible, limits should follow clearly defined features or constraints such as roads.</li> <li>Capacity - the ability of the settlement to accommodate future development based on existing and proposed infrastructure, on its access to facilities and services and levels of public transport. This also includes the availability of previously developed land.</li> <li>Existing planning consent for residential development or community facilities where development has been implemented.</li> <li>Character - the limit will be drawn to reflect the need to protect and enhance settlement character. This means protecting areas of open</li> </ul>	transmission infrastructure including overhead lines and wind turbines. The Proposed Development also makes appropriate use of previously developed land and existing infrastructure such as the existing National Grid 400kV substation adjacent, the existing gas NTS connection, existing cooling water discharge pipeline, existing tracks accessing the A18 and Chapel Lane, and two existing construction facilities.



Policy	Policy Document	Policy Text	Assessment
		<ul> <li>space or land with the characteristics of open countryside within and adjacent to settlements by not including them within development limits. Large rear gardens or paddocks stretching well out the villages built form will also be excluded.</li> <li>Development outside these defined boundaries will be restricted to that which is</li> </ul>	
		essential to the functioning of the countryside. This will include uses such as that related to agriculture, forestry or other uses which require a countryside location or that which will contribute to the sustainable development of the tourist industry.	
		The extent of the development limits will be defined in the Housing & Employment Land Allocations Development Plan Documents and shown on the accompanying Proposals Map and settlement insets.	
CS5 – Delivering Quality Design in North Lincolnshire		All new development in North Lincolnshire should be well designed and appropriate for their context. It should contribute to creating a sense of place. The council will encourage contemporary design, provided that it is	The Proposed Development is well designed for the scale of infrastructure required, and is appropriate for its context, which has an established presence of power generation and transmission development. The design



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	<ul> <li>appropriate for its location and is informed by its surrounding context. Design which is inappropriate to the local area or fails to maximise opportunities for improving the character and quality of the area will not be acceptable.</li> <li>New development in North Lincolnshire should: <ul> <li>Contribute towards creating a positive and strong identity for North Lincolnshire by enhancing and promoting the image of the area through the creation of high quality townscapes and streetscapes.</li> <li>Ensure it takes account of the existing built heritage from the earliest stages in the design process, in particular terms of scale, density, layout and access.</li> <li>Incorporate the principles of sustainable development throughout the whole design process. This will include site layout, minimising energy consumption, maximising use of onsite renewable forms of energy whilst mitigating against the impacts of</li> </ul> </li> </ul>	process, including how the design was informed by its surrounding context, is set out in the Design and Access Statement ( <b>Application Document Ref. 5.6</b> ). Appendix 1 of this document comprises a design principles statement which is secured in a requirement in Schedule 2 of the Draft DCO ( <b>Application Document Ref. 2.1</b> ). The mitigations set out in the Landscaping and Biodiversity Management and Enhancement Plan ( <b>Application Document Ref. 5.10</b> ) and Construction Traffic Management Plan ( <b>Application Document Ref. 7.2</b> ) are also secured via requirements in the Draft DCO. Operational staffing related traffic generation will be limited and a dedicated new permanent access route to the A18 is provided (Work Nos. 8 and 9B) taking account of community feedback during pre application consultation.



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		<ul> <li>climate change; for instance flood risk.</li> <li>Create safe and secure environments, which reduce the opportunities for crime and increase the sense of security for local residents through the use of Secured by Design guidance.</li> <li>Consider the relationship between any buildings and the spaces around them, and how they interact with each other as well as the surrounding area. The function of buildings should also be considered in terms of its appropriateness for the context in which it is located.</li> <li>Create attractive, accessible and easily distinguished public and private spaces that complement the built form.</li> <li>Support sustainable living and ensure that a mix of uses, which complement one another are incorporated.</li> <li>Provide flexibility in that new and existing buildings and spaces are able to respond to future social,</li> </ul>	



Policy	Policy Document	Policy Text	Assessment
		<ul> <li>technological, environmental and economic needs.</li> <li>Be easily accessible to all users via recognisable routes, interchanges and landmarks that are suitably connected to public transport links, community facilities and services and individual communities and neighbourhoods in North Lincolnshire. Buildings and spaces should be accessible by all sections of the community, and ensure that the principles of inclusive design are reflected.</li> <li>Incorporate appropriate landscaping and planting which enhances biodiversity or geological features whilst contributing to the creation of a network of linked greenspaces across the area. Tree planting and landscaping schemes can also assist in minimising the impacts of carbon emissions upon the environment.</li> <li>Integrate car parking provision within the existing public realm and other pedestrian and cycle routes.</li> </ul>	



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CS6 – Historic Environment	Core Strategy	<ul> <li>The council will promote the effective management of North Lincolnshire's historic assets through: <ul> <li>Safeguarding the nationally significant medieval landscapes of the Isle of Axholme (notably the open strip fields and turbaries) and supporting initiatives which seek to realise the potential of these areas as a tourist, educational and environmental resource.</li> <li>Preserving and enhancing the rich archaeological heritage of North Lincolnshire</li> <li>Ensuring that development within Epworth (including schemes needed to exploit the economic potential of the Wesleys or manage visitors) safeguards and, where possible, improves the setting of buildings associated with its Methodist heritage.</li> <li>Ensuring that development within North Lincolnshire's Market Towns safeguards their distinctive character and landscape setting, especially</li> </ul> </li> </ul>	The Proposed Development is consistent with promoting effective management of North Lincolnshire's historic assets. As set out in ES Volume I Chapter 15 (Cultural Heritage) ( <b>Application Document Ref.</b> <b>6.2.15</b> ) no significant effects on heritage assets are likely. Furthermore, impacts on below ground assets will be controlled by appropriate recording of archaeological remains prior to and during construction, secured by a requirement in Schedule 2 of the Draft DCO for a written scheme of investigation in accordance with the Outline Written Scheme of Investigation ( <b>Application Document Ref. 7.4</b> ).



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		Barton upon Humber, Crowle and Epworth. The council will seek to protect, conserve and enhance North Lincolnshire's historic environment, as well as the character and setting of areas of acknowledged importance including historic buildings, conservation areas, listed buildings (both statutory and locally listed), registered parks and gardens, scheduled ancient monuments and archaeological remains.	
		All new development must respect and enhance the local character and distinctiveness of the area in which it would be situated, particularly in areas with high heritage value.	
		Development proposals should provide archaeological assessments where appropriate.	
CS11 – Provision and Distribution of Employment Land	Core Strategy	The council will support the continued expansion and improvement of North Lincolnshire's economy in order to create a step change in the area's role regionally and nationally. This will be achieved through the identification and allocation in the Housing	The Proposed Development is consistent with supporting development elsewhere within North Lincolnshire that maximises other special locations, by making appropriate use of the existing brownfield



Policy	Policy Document	Policy Text	Assessment
Policy	Policy Document	Policy Textand Employment Land Allocations DPD of a range of appropriate sites for employment and economic uses that will meet the requirement for an additional 40 hectares of employment land between 2006 and 2021 as identified within the Regional Spatial Strategy. This land will accommodate traditional land use (use classes B1, B2 & B8) as well as key priority growth sectors.	<ul> <li>Iand, infrastructure and workforce available in Keadby.</li> <li>The Proposed Development will individually have major beneficial socioeconomic effects, providing construction employment and directly creating jobs in close proximity to Scunthorpe, as set out in Environmental Statement Volume I Chapter 26 (Socio-</li> </ul>
		Strategic employment sites will be identified in the following broad locations: 1. () General Provisions To support development elsewhere within North Lincolnshire that meet local employment needs and maximises other special locations.	<ul> <li>economics) (Application Document Ref. 6.2.16).</li> <li>The Proposed Development will connect into and indirectly enable the Zero Carbon Humber CCUS cluster, a 'Superplace' envisaged in the Energy White Paper where energy, CCUS and hydrogen technologies could agglomerate and generate significant numbers of jobs.</li> </ul>
		In considering all development proposals for employment purposes in North Lincolnshire, regard should be given to making all locations accessible by range of transport modes in particular by public transport, cycling and walking. Accordingly, travel	



Policy	Policy Document	Policy Text	Assessment
		plans will be required setting out how employment locations will be linked to settlements in the area.	
		Rural Economy	
		To deliver a thriving rural economy by supporting development or activities that assist in rural regeneration and that strengthen or diversify rural businesses.	
CS16 – North Lincolnshire's Landscape, Greenspace and Waterscape	Core Strategy	<ul> <li>The council will protect, enhance and support a diverse and multi-functional network of landscape, greenspace and waterscape through:</li> <li>1. Identifying in supporting documents within or evidencing the Local Development Framework, a network of strategically and locally important landscape, greenspace and waterscape areas. Development on or adjacent to these areas will not be permitted where it would result in unacceptable conflict with the function(s) or characteristic of that area.</li> </ul>	The Site is not subject to any national landscape designations, nether are there any within the immediate vicinity of the Site. Furthermore, the Proposed Development will not result in the loss of open space or features that are important to the local landscape. ES Volume I Chapter 24 (Landscape and Visual Amenity ( <b>Application Document</b> <b>Ref. 6.2.14</b> ) identifies that there would be some significant adverse effects at a number of nearby undesignated viewpoints, however, the benefits of the Proposed Development are considered to outweigh the impacts on these viewpoints.



Policy	Policy Document	Policy Text	Assessment
		<ol> <li>Requiring development proposals to improve the quality and quantity of accessible landscape, greenspace and waterscape, where appropriate.</li> <li>Requiring development proposals to address local deficiencies in accessible landscape, waterscape and greenspace where appropriate.</li> </ol>	Mitigation proposals are set out in the Landscaping and Biodiversity Management and Enhancement Plan ( <b>Application</b> <b>Document Ref. 5.10</b> ), secured in a requirement in Schedule 2 of the Draft DCO. Further measures are set out in the Design Principles Statement (Appendix 1 of the Design and Access Statement, <b>Application</b> <b>Document Ref. 5.6</b> ).
		<ol> <li>Requiring the protection of trees, hedgerows and historic landscape to be specified where appropriate.</li> </ol>	
		The creation and maintenance of the network of landscape, green space and waterscapes will be secured by a range of measures, including protecting open space, creating new open spaces as part of new development, and by using developer contributions to create, improve and maintain green infrastructure assets where appropriate.	
CS17 - Biodiversity	Core Strategy	The council will promote effective stewardship of North Lincolnshire's wildlife through:	The Proposed Development will promote effective stewardship of North Lincolnshire's wildlife through measures outlined in the Landscape and Biodiversity Management and Enhancement Plan ( <b>Application</b>



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		<ol> <li>Safeguarding national and international protected sites for nature conservation from inappropriate development.</li> </ol>	<b>Document Ref. 5.10</b> ) which describes and demonstrates proposals to achieve benefits for biodiversity.
		<ol> <li>Appropriate consideration being given to European and nationally important habitats and species.</li> </ol>	ES Volume I Chapter 6 (Biodiversity and Nature Conservation) (Application Document Red. 6.2.6) identifies that the Proposed Development has been designed
		<ol> <li>Maintaining and promoting a North Lincolnshire network of local wildlife sites and corridors, links and stepping stones between areas of natural green space.</li> </ol>	and located to have no likely significant adverse residual construction, operation or decommissioning effects.
		<ol> <li>Ensuring development retains, protects and enhances features of biological and geological interest and provides for the appropriate management of these features.</li> </ol>	
		5. Ensuring development seeks to produce a net gain in biodiversity by designing in wildlife, and ensuring any unavoidable impacts are appropriately mitigated for.	
		6. Supporting wildlife enhancements that contribute to the habitat	



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		restoration targets set out in the North Lincolnshire's Nature Map and in national, regional and local biodiversity action plans.	
		<ol> <li>Improving access to and education/interpretation of biodiversity sites for tourism and the local population, providing their ecological integrity is not harmed.</li> </ol>	
CS18 – Sustainable Resource Use and Climate Change	Core Strategy	The council will actively promote development that utilises natural resources as efficiently and sustainably as possible. This will include:1. Meeting high water efficiency standards, and incorporating new technologies to recycle and conserve water resources.	The Proposed Development is considered to utilise natural resources as efficiently and sustainable as possible. Various chapters of Environmental Statement Volume I ( <b>Application Document Ref. 6.2</b> ) set out the environmental impacts of the Proposed Development and how pollution is minimised and how resources are to be used efficiently.
		<ol> <li>Requiring the use of Sustainable Urban Drainage Systems (SuDS) where practicable.</li> <li>Supporting the necessary improvement of flood defences and surface water infrastructure required</li> </ol>	Chapter 12 (Water Environment and Flood Risk) ( <b>Application Document Ref. 6.2.12</b> ) along with the ES Volume II Appendix 12A: Flood Risk Assessment ( <b>Application</b> <b>Document Ref. 6.3.20</b> ) contain specific information relating to the use of SuDS.



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		<ul> <li>against the actions of climate change, and preventing developme in high flood risk areas wherever practicable and possible.</li> <li>4. Meeting required national reductior of predicted CO2 emissions by at least 34% in 2020 and 80% in 2050 by applying the following measures on development proposals. Requiri all industrial and commercial premises greater than 1000 square metres to provide 20% of their expected energy demand from on site renewable energy until the cod for such buildings is applied nationally. Where developers consider these Codes and targets cannot be met on the basis of viability they will be required to provide proof through open book discussions with the council at the planning application stage.</li> <li>5. Ensuring building design reduces energy consumption by appropriate methods such as high standards of insulation, avoiding development in</li> </ul>	secure compliance with the Flood Risk Assessment, and require readiness measures for the future installation of heat offtakes, including space on site for Combined Heat and Power, and a Construction Environmental Management Plan. Furthermore, the Proposed Development features first of a kind technology for carbon capture and the best available techniques will be secured in the Environmental Permit thereby reducing emissions and contributing to national Net Zero targets.



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		areas subject to significant effects from shadow, wind and frost, using natural lighting and ventilation, capturing the sun's heat, where appropriate.	
		<ol> <li>Supporting development that minimises the consumption and extraction of minerals by making the greatest possible reuse or recycling of materials in new construction, an by making best use of existing buildings and infrastructure.</li> </ol>	
		<ol> <li>Supporting development that seeks to minimise waste and facilitates recycling and using waste for energ where appropriate.</li> </ol>	
		8. Ensuring that development and land use in areas close to the Humber Estuary and rivers responds appropriately to the character of the area, in the interests of preserving and making best use of limited resources.	



Policy	Policy Document	Policy Text	Assessment
		<ol> <li>Supporting development that will help to reduce the need to travel for people using that development.</li> </ol>	
		10. Ensuring development and land use helps to protect people and the environment from unsafe, unhealthy and polluted environments, by protecting and improving the quality of the air, land and water.	
		11. Supporting renewable sources of energy in appropriate locations, where possible, and ensuring that development maximises the use of combined heat and power, particularly at the South Humber Bank employment site and where energy demands for more than 2MW are required for development.	
		12. Supporting new technology and development for carbon capture and the best available clean and efficient energy technology, particularly in relation to the heavy industrial users	



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		<ul> <li>in North Lincolnshire, to help reduce CO2 emissions.</li> <li>13. Promote the use of a greenspace strategy and a green infrastructure plan, where applicable, which could help reduce the effects of climate change.</li> </ul>	
CS19 – Flood Risk	Core Strategy	<ul> <li>The council will support development proposals that avoid areas of current or future flood risk, and which do not increase the risk of flooding elsewhere. This will involve a risk based sequential approach to determine the suitability of land for development that uses the principle of locating development, where possible, on land that has a lower flood risk, and relates land use to its vulnerability to flood. Development in areas of high flood risk will only be permitted where it meets the following prerequisites:</li> <li>1. 1. It can be demonstrated that the development provides wider sustainability benefits to the</li> </ul>	Chapter 12 'Water Environment and Flood Risk' of the ES Volume I ( <b>Application</b> <b>Document Ref. 6.2.12</b> ) provides an assessment of likely significant effects on the water environment and flood risk as a result of construction, operational and decommissioning phases of the Proposed Development. A site-wide Flood Risk Assessment ('FRA') is provided at Appendix 12A of ES Volume IIII (Document Ref. 6.3.20). In terms of fluvial flood risk, the entire Proposed Development Site is within Flood Zone 3. However, the flood defences are sufficient to prevent overtopping during events with a 0.5% annual probability, the overall sensitivity to fluvial flooding is therefore considered 'Low'.



Policy	Policy Document	Policy Text	Assessment
		<ul> <li>community and the area that outweigh flood risk.</li> <li>2. The development should be on previously used land. If not, there must be no reasonable alternative developable sites on previously developed land.</li> <li>3. A flood risk assessment has demonstrated that the development will be safe, without increasing flood risk elsewhere by integrating water management methods into development.</li> <li>Development within the Lincolnshire Lakes area will comply with the flood management principals set out in the Western Scunthorpe Urban Extension Exception Test Strategy. Any further flood management proposals will have to be agreed by both the council and the Environment Agency during the process of the Lincolnshire Lakes Area Action Plan. Development proposals in flood risk areas which come forward in the remainder of North Lincolnshire shall be guided by the</li> </ul>	The construction and operation of the Proposed Development is considered to have a mixture of slight adverse (not significant) and neutral (not significant) effects on the River Trent, Stainforth and Keadby Canal and the various drains in the area. The Proposed Development is resilient to flooding and will not result in an increased risk of flooding elsewhere. The location comprises largely previously developed land and the Proposed Development provides extensive wider sustainability benefits due to its role in providing high amounts of low carbon electricity generation consistent with the



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		Strategic Flood Risk Assessment for North Lincolnshire and North East Lincolnshire. This will ensure that proposals include site specific flood risk assessments which take into account strategic flood management objectives and properly apply the Sequential and, where necessary, Exception Tests. In addition development will be required, wherever practicable, to incorporate Sustainable Urban Drainage Systems (SUDS) to manage surface water drainage. The Council will also seek to reduce the increase in flood risk due to climate change through measures to reduce carbon dioxide emissions.	and not result in significant effects in terms of flooding. The EA has reviewed the Flood Risk Assessment undertaken by the Applicant at various stages pre application. Details of the flood risk mitigation measures detailed within the DCO Application will be secured by Requirement 14 'Flood risk mitigation' of the draft DCO ( <b>Application</b> <b>Document Ref. 2.1</b> ). Details of surface and foul water drainage (taking account of flood risk mitigation) will be secured by Requirements 12 and 13 respectively.
CS20 – Sustainable Waste Management	Core Strategy	<ul> <li>The Council will consider new and enhanced facilities for the treatment and management of waste in the following broad strategic areas:</li> <li>Scunthorpe</li> <li>South Humber Bank Employment Area</li> <li>Flixborough Industrial Estate</li> <li>Power station sites and other high energy usage installations</li> </ul>	The Proposed Development will promote sustainable waste management where possible. A requirement in Schedule 2 of the draft DCO ( <b>Application Document Ref. 2.1</b> ) requires that a Framework Construction Environmental Management Plan including a a construction site waste management plan has been approved by the relevant planning authority before development is commenced.



Policy	<b>Policy Document</b>	Policy Text	Assessment
		<ul> <li>Farms which will directly use organic agricultural products derived from waste treatment</li> <li>In general a sequential search will be made for the location of waste management facilities from the highest to lowest preference as follows:</li> </ul>	The Proposed Development does not constrain existing or proposed waste management facilities.
		<ol> <li>On-site management of waste where it arises at retail, industrial and commercial locations, particularly in the main urban areas (The Proximity Principle)</li> </ol>	
		2. Pursuit of neighbourhood self- sufficiency, at the lowest practicable level for the waste stream concerned (The Self-Sufficiency Principle)	
		<ol> <li>Encouraging co-location of waste facilities - at Materials or Resource Recovery Parks for example</li> </ol>	
		4. Locations at existing mineral extraction and waste landfill sites	



Policy	Policy Document	Policy Text	Assessment
		<ol> <li>Locations at established and proposed industrial and business sites</li> </ol>	
		6. Locations in redundant farm buildings and associated land	
		7. Use of other previously-developed land.	
		<ul> <li>The Council will promote sustainable wastemanagement by:</li> <li>Requiring Site Waste Management Plans for future major developments to minimise waste</li> <li>Requiring the integration of facilities for waste minimisation, re-use, recycling and composting, in association with the planning, construction and occupation of new development.</li> <li>Providing guidance on minimising potential social, environmental and economic impacts that are likely to arise in the development of waste infrastructure</li> </ul>	



Policy	Policy Document	Policy Text	Assessment
		Establishing a planning policy framework that identifies suitable locations for waste management.	
CS25 – Promoting Sustainable Transport	Core Strategy	The council will support and promote a sustainable transport system in North Lincolnshire that offers a choice of transport modes and reduces the need to travel through spatial planning and design and by utilising a range of demand and network management tools.	During the construction of the Proposed Development it is proposed that AILs will be bought onto Site via water freight where possible, and the contractor will review options for the use of waterborne transport when sourcing construction materials.
		<ul> <li>Transport Demand Management</li> <li>Reduce the need to travel and improve accessibility for all as part of all future spatial design within North Lincolnshire</li> <li>Introduce appropriate demand management measures, to reduce car based travel by ensuring highway safety, improving and encouraging walking and cycling and integrate such measures with a high quality public transport network</li> <li>Require that transport provision is integrated into the design of all development from the start of any development project</li> </ul>	Furthermore, a Construction Traffic Management Plan and Construction Workers' Travel Plan will be implemented during construction to manage traffic and transportation effects, these will be controlled via Requirements 25 and 26 of Schedule 2 of the Draft DCO ( <b>Application</b> <b>Document Ref. 2.1</b> ) respectively. Framework versions of these documents can be found at <b>Application Document Refs.</b> <b>7.2 and 7.3</b> respectively. The Proposed Development also features the creation of a new Site entrance and mitigation measures outlined in ES Volume I Chapter 10 (Traffic and Transport) ( <b>Application Document Ref. 6.2.10</b> ) and



Policy	Policy Document	Policy Text	Assessment
		<ul> <li>Apply maximum car parking standards and a car parking charging regime within the context of urban and rural renaissance</li> <li>Support the progressive improvements of a high quality public transport network by working in partnership with public transport operators and community transport providers to ensure a cohesive, flexible approach to improve the public transport network in North Lincolnshire and public transport connections beyond its boundaries.</li> <li>Transport Network Management         <ul> <li>Support and encourage a Rural Transport Strategy for the rural parts of North Lincolnshire</li> <li>Support the improvement and enhancement (significant upgrades) of transport inter-changes (relating to high quality facilities) in North Lincolnshire, principally at Scunthorpe, Barton upon Humber, Brigg and Humberside Airport</li> <li>Integrate and enhance the whole spectrum of local transport services</li> </ul> </li> </ul>	ES Volume II Appendix 10A (Application Document Ref. 6.3.10).



Policy	Policy Document	Policy Text	Assessment
		<ul> <li>to feed into, and be complementary with, a high quality public transport network</li> <li>Support the development of a freight strategy to include lorry parking sites, HGV route management and provision of facilities for (and promote the benefits of) transferring freight delivery from road to rail and/or water transport, wherever practical, particularly in relation to the movement of freight to and from the South Humber Ports and Trent Wharves</li> <li>Support the progressive introduction of network management technology to maximise existing and future capacity and investment across all transport modes, and to reduce congestion and delay for the benefit of both business and domestic travellers in North Lincolnshire</li> <li>Establish local, regional and national priorities for transport infrastructure investment</li> <li>Promote the continuation and improvement of North Lincolnshire's</li> </ul>	



Policy	Policy Document	Policy Text	Assessment
IN10 – Wharves	Local Plan	<ul> <li>network of safe walking and cycling routes, including the Viking Way, the Public Rights of Way network and the National Cycle Route, as well as the local footway and cycleway network and linking them to key locations in the urban and rural areas of North Lincolnshire (communities, recreational and tourist areas).</li> <li>Proposals for new or extended port, wharf and jetty facilities on the Rivers Humber and Trent will be permitted provided that there is no adverse impact on: <ol> <li>sites of nature conservation interest;</li> <li>high quality agricultural land;</li> <li>the landscape of river corridors and coastal margins;</li> <li>the flood defence system;</li> <li>the strategic and local road network; and</li> <li>the amenity of settlements.</li> </ol> </li> </ul>	Any water freight during the construction of the Proposed Development is to make use of the existing 'Railway Wharf' as is, subject to inspection and repairs, and so does not required a new or extended port, wharf or jetty facility with the potential for adverse impacts.
RD1 – Development	Local Plan	Proposals for the development or change of use of agricultural land will only be permitted	As set out in ES Volume I Chapter 13 (Geology, Hydrogeology and Land



Policy	Policy Document	Policy Text	Assessment
involving High Quality Agricultural Land		<ul> <li>where this would not result in the loss of the best and most versatile land (Grades 1, 2 and 3a) unless it can be demonstrated that the proposed development cannot be accommodated on: <ol> <li>land within settlement boundaries; or</li> <li>land which is allocated for development; or</li> <li>previously developed land; or</li> <li>land of a lower agricultural grade.</li> </ol> </li> <li>Where development of agricultural land is unavoidable, areas of poorer quality land should be developed in preference to those of higher quality, except where other sustainability considerations suggest otherwise.</li> <li>For development to be permitted on higher grades of land there has to be an overriding need for the development.</li> </ul>	Contamination) (Application Document 6.2.13), according to the Landmark Information Group GIS data, Natural England reports the Agricultural Land Classification (ALC) to be Grade 2 for the majority of the Proposed Development Site. The ALC within and around the proposed access road from the A18 and the potential temporary laydown areas in adjacent agricultural fields is Grade 1. Existing previously developed land and land owned by the Applicant has been considered for temporary laydown and used where possible, but some is constrained (fully or partially) in terms of access, sizing, duration, or the presence of overhead lines. The selection process is described in the Design and Access Statement ( <b>Application</b> <b>Document Ref. 5.6</b> ). A Soil Resources Survey will be prepared as part of the final CEMP(s), controlled by Requirement 17 of Schedule 2 of the draft DCO ( <b>Application</b> <b>Document Ref. 2.1</b> ). The framework Soil Resources Plan is included in the Framework CEMP ( <b>Application Document</b> <b>Ref. 7.1</b> ).



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Policy RD2 – Development in the Open Countryside	Policy Document Local Plan	<ul> <li>Development in the open countryside will be strictly controlled. Planning permission will only be granted for development which is: <ol> <li>essential to the efficient operation of agriculture or forestry;</li> <li>employment related development appropriate to the open countryside;</li> <li>affordable housing to meet a proven local need;</li> <li>essential for the provision of outdoor sport, countryside recreation, or local community facilities;</li> <li>for the re-use and adaptation of existing rural buildings;</li> <li>for diversification of an established agricultural business;</li> <li>for the replacement, alteration or extension of an existing dwelling;</li> <li>essential for the provision of an established</li> </ol> </li> </ul>	The Proposed Development, being power generation, would be unsuitable within the development boundaries of Scunthorpe or one of North Lincolnshire's market towns. All land required for the Proposed Development has been carefully chosen for operational and technical reasons. The Proposed Development is consistent with this policy as it constitutes a form of economic development at an existing established employment site, and will be located largely on previously used land and making use of existing structures and infrastructure. It is located and accessed away from residential areas in an area already characterised by substantial power infrastructure including overhead lines, wind turbines and two power stations, therefore is not out of keeping with local character. Design mitigation is set out in the Landscaping and Biodiversity Management and Enhancement Plan (Application Document Ref. 5.10) (with further measures set out in the Design Principles Statement (Appendix 1 of the Design and Access Statement, <b>Application</b>
		<ol> <li>for the replacement, alteration or extension of an existing dwelling;</li> </ol>	(Application Document Ref. 5.10) (with further measures set out in the Design Principles Statement (Appendix 1 of the



Policy	Policy Document	Policy Text	Assessment
		Provided that:	Requirements in Schedule 2 of the Draft DCO ( <b>Application Document Ref. 2.1</b> ).
		<ul> <li>a. the open countryside is the only appropriate location and development cannot reasonably be accommodated within defined development boundaries;</li> </ul>	
		<ul> <li>b. the proposed development accords with the specific requirements set out in the relevant policies of this chapter and elsewhere in this Local Plan;</li> </ul>	
		c. the development would not be detrimental to the character or appearance of the open countryside or a nearby settlement in terms of siting, scale, massing, design and use of materials; and	
		<ul> <li>d. the development would not be detrimental to residential amenity or highway safety; and</li> </ul>	
		e. account is taken of whether the site is North Lincolnshire Local Plan - Adopted Plan May 2003 93 Rural	



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		Development capable of being served by public transport; and f. the development is sited to make the best use of existing and new landscaping.	
T1 – Location of Development	Local Plan	<ul> <li>Development proposals, which generate a significant volume of traffic movement, will be permitted provided that they are located:</li> <li>1. in the urban area of Scunthorpe and Bottesford, Barton upon Humber, Brigg, and the areas identified for development at the South Humber Bank and Humberside International Airport; and</li> <li>2. where there is good access to rail, water and air transport, or to the North Lincolnshire Strategic Road Network; and</li> <li>3. where there is good foot, cycle and public transport to be provided.</li> </ul>	It is considered that the Proposed Development consist of essential infrastructure, that being power generation, that would be unsuitable within the development boundaries of Scunthorpe or one of North Lincolnshire's market towns. All land required for the Proposed Development has been carefully chosen for operational and technical reasons. It does, however, make use of previously developed land and existing infrastructure and accesses. Furthermore, the Proposed Development is located close to the River Trent which is proposed to be used for the water freight of AlLS during construction. A Construction Traffic Management Plan ( <b>Application Document Ref. 7.2</b> ) is secured via a requirement in the Draft DCO. Operational staffing related traffic generation will be limited and a dedicated new



Policy	Policy Document	Policy Text	Assessment
			permanent access route to the A18 is provided (Work Nos. 8 and 9B) taking account of community feedback during pre application consultation.
T2 – Access to Development	Local Plan	<ul> <li>All development must be provided with a satisfactory access. In larger developments it should be served adequately by: <ol> <li>being readily accessible by a choice of transport modes; and</li> <li>existing public transport services and infrastructure; or</li> <li>additions or extensions to such services linked directly to the development; and</li> <li>the existing highway network.</li> </ol> </li> </ul>	The Proposed Development will use and improve an existing purpose built and satisfactory access onto the existing highway network. Access to and from the Proposed Development Site for all construction workers would be via the existing construction site entrance for Keadby 2 Power Station, located off the A18. An early part of the construction phase will comprise junction improvements and the replacement of an existing private bridge crossing ('Mabey Bridge'). This would then be used during the construction and operational stages of the Proposed Development.
T5 – Green Travel Plans	Local Plan	The Council will encourage business and organisations that either employ or attract a large number of visitors to draw up Green Travel Plans. Where development is permitted the use of conditions or planning obligations may be sought to ensure that a	A Construction Worker Travel Plan ('CWTP') will be secured by Requirement 26 of Schedule 2 of the draft DCO ( <b>Application</b> <b>Document Ref. 2.1</b> ), and will include measures to promote the use of sustainable transport modes to and from the authorised



Policy	Policy Document	Policy Text	Assessment
		Green Travel Plan is binding on the developer.	development by construction staff. A framework CWTP can be found at <b>Application Document Ref. 7.2</b> .
T6 – Pedestrian Routes and Footpaths	Local Plan	The safety, convenience and attractiveness of footpaths and pedestrian areas will be improved, and areas created, to form a pedestrian-friendly network throughout North Lincolnshire. Major new developments will be required to include links to nearby existing or proposed pedestrian routes.	No impacts on or additional demand for pedestrian networks result from the Proposed Development. Due to the secure nature of the Proposed Development it is not considered appropriate for linkages between the Proposed Development and the wider pedestrian network, besides access for employees. ES Volume I Chapter 10 (Traffic and Transport) ( <b>Application Document</b> <b>Ref. 6.2.10</b> ) found that the effect of the Proposed Development for pedestrian amenity would be negligible.
T8 – Cyclists and Development	Local Plan	<ul> <li>New developments will be required to:</li> <li>1. include cycle links with existing or proposed routes where such opportunity exists; and</li> <li>2. ensure that the provision of cycle parking facilities are in accordance with the standards set out in Appendix 2.</li> </ul>	While cycling is not expected to be a significant mode during construction due to the need to carry PPE and tools, it could offer a viable mode for some operational staff. The upgraded access included as part of the Proposed Development is likely to be suitable for cyclists accessing the Site for work and will also reduce traffic on narrow roads in the village thereby improving cycling suitability here. A Construction Worker Travel Plan ('CWTP') will be secured by Requirement 26 of Schedule 2 of the draft



Policy	Policy Document	Policy Text	Assessment
			DCO ( <b>Application Document Ref. 2.1</b> ), and will include measures to promote the use of sustainable transport modes to and from the authorised development by construction staff. A framework CWTP can be found at <b>Application Document Ref. 7.2</b> .
T14 – The North Lincolnshire Strategic Road Network (NLSRN)	Local Plan	The Council will manage the use of roads within North Lincolnshire by establishing the area's Strategic Road Network. Traffic will be concentrated onto these roads whose main purpose will be to carry traffic of more than local significance of both public and private traffic.	The Proposed Development is consistent with the aims of this policy as it would concentrate traffic onto North Lincolnshire's Strategic Road Network. HGV traffic has been assigned to the most direct route to the strategic road network which is the M180 Junction 2 via the A18 and the A161.
T19 – Car Parking Provision and Standards	Local Plan	<ul> <li>Provision will be made for car parking where it would:</li> <li>1. meet the operational needs of businesses; or</li> <li>2. be essential to the viability of a new development; or</li> <li>3. improve the environment or safety of streets; or</li> </ul>	Construction stage parking arrangements are controlled in the Construction Worker Travel Plan ('CWTP') which will be secured by Requirement 26 of Schedule 2 of the draft DCO ( <b>Application Document Ref. 2.1</b> ). A framework CWTP can be found at <b>Application Document Ref. 7.2</b> . Operational stage parking arrangements are controlled in the detailed design requirement (Requirement 5) in Schedule 2 of the Draft DCO. These will meet the operational needs of the business and ensure its viability while



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		<ul> <li>4. meet the needs of people with disabilities; or</li> <li>5. be needed by visitors to the countryside;</li> <li>and comply with Appendix 2 –Parking Provision Guidelines.</li> </ul>	remaining within the assessment set out in the ES, and would be designed after the making of the DCO as part of the detailed design process.
T23 – Water Freight	Local Plan	<ul> <li>Provision Guidelines.</li> <li>Proposals for new water freight development will be required to demonstrate that the movement of heavy goods by road is minimised by making use of deep-water frontages in the following ways: <ol> <li>locating on deep-water frontages;</li> <li>ensuring transfer of bulk goods from sea to inland makes optimum use of railways, rivers, canals and pipelines/conveyor belts where appropriate.</li> </ol> </li> </ul>	Although the Proposed Development does not feature any new water freight development, it is considered to minimise the movement of heavy goods by road as the Applicant will be prioritising the use of water freight for Abnormally Indivisible Loads ('AILs'), using the existing Waterborne Transport Offloading Area.
T24 – Road Freight	Local Plan	In settlements where heavy goods vehicles endanger safety, cause community severance or environmental intrusion, and alternative routes exist, the movement and parking of these vehicles will be restricted.	The Proposed Development is considered to protect safety and precent community severance and environmental intrusion through the use of the most direct route onto the Strategic Road Network for construction traffic and through the use of waterways for AILs.



Policy	Policy Document	Policy Text	Assessment
LC1 – Special Protection Areas, Special Areas of Conservation and Ramsar Sites	Local Plan	<ul> <li>The environmental impact of moving freight by road will be reduced by: <ul> <li>i. concentrating lorries onto the North Lincolnshire Strategic Road Network; and</li> <li>ii. banning heavy goods vehicles from sensitive areas; and</li> <li>iii. encouraging the development of rail freight facilities; and</li> <li>iv. encouraging the use of the waterways.</li> </ul> </li> <li>Proposals for development which may affect an SPA, a proposed SPA, a SAC or candidate SAC will be assessed according to their implications for the site's conservation objectives. Proposals not directly connected with, or necessary for, the site, and which are likely to have an significant effect on the site (either individually or in combination with other proposals), will not be permitted unless it can be conclusively demonstrated that: <ul> <li>1. there is no alternative solution; and</li> </ul> </li> </ul>	ES Volume I Chapter 11 (Biodiversity and Nature Conservation) (Application Document Ref. 6.2.11) identified six European Sites within the desk study area, which was 15km from the Proposed Development. These consisted of the Humber Estuary Ramsar Site, Humber Estuary Special Area of Conservation



Policy	Policy Document	Policy Text	Assessment
		2. there are imperative reasons of overriding public interest for the development.	reference to the existing baseline conditions and potential pathways for impact. As a consequence, no significant adverse residual construction, operation or
		Where the site hosts a priority natural habitat type or a priority species, proposals will not be permitted unless it can be conclusively demonstrated that it is necessary for reasons of human health or public safety, or for consequences of primary importance for nature conservation.	decommissioning effects are anticipated on these protected sites as a result of construction of the Proposed Development.
		Where such a development does proceed, the use of conditions or planning obligations to secure all compensatory measures necessary to comply with Article 3 of the EEC Habitats and Species Directive will be considered.	
LC2 – Sites of Special Scientific Interest and National Nature Reserves	Local Plan	Proposals for development in, or likely to affect, Sites of Special Scientific Interest will be subject to special scrutiny. Where such development may have an adverse effect, directly or indirectly on the SSSI, it will not be permitted unless the reasons for the development clearly outweigh the nature conservation value of the site itself and the	ES Volume I Chapter 11 (Biodiversity and Nature Conservation) (Application Document Ref. 6.2.11) identified 22 Sites of Special Scientific Interest ('SSSI') and 1 National Nature Reserve within the desk study area, which was 15km from the Proposed Development, and a full list of those Sites can be found in Table 11.7.



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		<ul> <li>national policy to safeguard the national network of such sites.</li> <li>Where a site is a National Nature Reserve (NNR) or a site identified under the Nature Conservation Review (NCR) or Geological Conservation Review (GCR) particular regard will be paid to the individual site's national importance.</li> <li>In all cases where development is permitted which would damage the nature</li> </ul>	The Proposed Development has been sensitively designed and positioned with reference to the existing baseline conditions and potential pathways for impact. As a consequence, no significant adverse
		conservation value of the site, such damage should be kept to a minimum. Where development is permitted the use of conditions or planning obligations to ensure the protection and enhancement of the site's nature conservation value and other appropriate compensatory measures will be considered.	
LC4 – Development Affecting Sites of Local Nature Conservation	Local Plan	Any development or land use change which is likely to have an adverse impact on a Local Nature Reserve, a Site of Importance for Nature Conservation or a Regionally Important Geological Site will not be approved unless it can be clearly	ES Volume I Chapter 11 (Biodiversity and Nature Conservation) (Application Document Ref. 6.2.11) identified no Local Nature Reserves, Sites of Importance for Nature Conservation or Regionally Important



Policy	Policy Document	Policy Text	Assessment
Importance		demonstrated that there are reasons for the proposal which outweigh the need to safeguard the intrinsic nature conservation value of the site or feature.	Geological Sites within the relevant desk study area.
		In all cases where development is permitted which may damage the nature conservation value of the site, such damage shall be kept to a minimum. Where development is permitted the use of conditions or planning obligations to ensure the protection and enhancement of the site's nature conservation value and other appropriate compensatory measures will be considered.	
LC5 – Species Protection	Local Plan	Planning permission will not be granted for development or land use changes which would have an adverse impact on badgers or species protected by Schedules 1, 5 or 8 of the Wildlife and Countryside Act 1981 (as amended). Where development is permitted that may have an effect on those species, conditions or the use of planning agreements will be considered to: 1. facilitate the survival of individual	Based on the findings of ES Volume II Appendix 11D: Confidential Badger Report ( <b>Application Document Ref. 6.3.15</b> ), the potential construction effect on badgers is assessed to be negligible (not significant). As set out in ES Volume I Chapter 11 (Biodiversity and Nature Conservation) ( <b>Application Document Ref. 6.2.11</b> ) the effects on other species such as bats, water
		members of the species; and	voles, grass snakes, breeding birds, fish and aquatic invertebrates during construction



Policy	Policy Document	Policy Text	Assessment
		2. reduce disturbance to a minimum; and	has been assessed as negligible (not significant).
		<ol> <li>provide adequate alternative habitats to sustain at least the current levels of population.</li> </ol>	Similarly, the effects on fish, bats, terrestrial invertebrates and flora during operation was assessed as negligible (not significant).
			The DCO application is supported by a standalone Landscape and Biodiversity Management and Enhancement Plan ('LBMEP') ( <b>Application Document Ref. 5.10</b> ) which sets out biodiversity enhancement proposals and the habitat management and monitoring proposed to deliver these. It also confirms that the proposed enhancement measures are suitable to achieve no net loss and a net gain in biodiversity within the Proposed that submission and approval of the final LBMEP will be secured by a Requirement of the draft DCO ( <b>Application Document Ref. 2.1</b> ).
LC6 – Habitat Creation	Local Plan	Provision will be made for the creation of nature reserves and new wildlife habitats	The Proposed Development includes provision for the creation of new wildlife
		both in rural and urban areas. Where appropriate, in granting planning permission,	habitats. The application is supported by a standalone Landscape and Biodiversity



Policy Policy Document	Policy Text	Assessment
	<ul> <li>the creation of such areas will be required for the following types of development: <ol> <li>in association with the reclamation of former mineral workings and waste disposal sites;</li> <li>in association with schemes for derelict land clearance;</li> <li>iii) on land which is no longer required for long term agricultural use. Particular emphasis will be placed on the creation of habitats such as wet and dry heathland, wet woodland and reedbed in keeping with local and national biodiversity targets and provision of habitat for protected species.</li> </ol></li></ul>	Management and Enhancement Plan ('LBMEP') (Application Document Ref. 5.10) which sets out biodiversity enhancement proposals and the habitat management and monitoring proposed to deliver these. It also confirms that the proposed enhancement measures are suitable to achieve no net loss and a net gain in biodiversity within the Proposed Development Site. It is proposed that submission and approval of the final LBMEP will be secured by a Requirement of the draft DCO (Application Document Ref. 2.1). The biodiversity enhancement measures proposed comprise: • creation of flower-rich native grassland; • new species-rich native hedgerow plantings; • enhancement of field drains for water voles and other aquatic biodiversity; and • installation of nest boxes for barn owl and other birds, habitat



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			creation for willow tit, and installation of roosting boxes for bats.
LC7 – Landscape Protection	Local Plan	Where development is permitted within rural settlements or within the open countryside, special attention will be given to the protection of the scenic quality and distinctive local character of the landscape. Development which does not respect the character of the local landscape will not be permitted.	The Proposed Development comprises power generation infrastructure that would be unsuitable within the development boundaries of Scunthorpe or one of North Lincolnshire's market towns. All land required for the Proposed Development has been carefully chosen for operational and technical reasons. It does, however, make use of previously developed land and existing infrastructure. It constitutes a form of economic development at an existing established employment site, and will be located largely on previously used land and making use of existing structures and infrastructure. The generating station ( <b>Work No. 1</b> ) is located in an area already characterised by substantial power infrastructure including overhead lines and the scale of the main structures is controlled in Schedule 11 of the Draft DCO. Other elements of the Proposed
			Development have been designed to respect the nature of the Open Countryside. This



Policy	Policy Document	Policy Text	Assessment
			includes in the scale and siting of the gatehouse near the A18 which is of modest scale as controlled in the parameters set out in Schedule 11 of the Draft DCO.
LC12 – Protection of Trees, Woodland and Hedgerows	Local Plan	Proposals for all new development will, wherever possible ensure the retention of trees, woodland and hedgerows. Particular regard will be given to the protection of these features within the setting of settlements, the protection of ancient woodlands and historic hedgerows and the amenity value of trees within built up areas. Tree preservation orders will be made where trees which contribute to local amenity or local landscape character are at risk. Landscaping and tree and hedgerow planting schemes will be required to accompany applications for new development where it is appropriate to the development and its setting.	The Proposed Development includes provision for, where possible, the retention of trees and hedgerows and the creation of new species-rich native hedgerow plantings. The application is supported by a standalone Landscape and Biodiversity Management and Enhancement Plan ('LBMEP') ( <b>Application Document Ref. 5.10</b> ) which sets out biodiversity enhancement proposals and the habitat management and monitoring proposed to deliver these. It also confirms that the proposed enhancement measures are suitable to achieve no net loss and a net gain in biodiversity within the Proposed Development Site. It is proposed that submission and approval of the final LBMEP will be secured by a Requirement of the draft DCO ( <b>Application Document Ref. 2.1</b> ). The biodiversity enhancement measures proposed comprise:



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			<ul> <li>creation of flower-rich native grassland;</li> </ul>
			<ul> <li>new species-rich native hedgerow plantings;</li> </ul>
			<ul> <li>enhancement of field drains for water voles and other aquatic biodiversity; and</li> </ul>
			<ul> <li>installation of nest boxes for barn owl and other birds, habitat creation for willow tit, and installation of roosting boxes for bats.</li> </ul>
HE5 – Development affecting Listed Buildings	Local Plan	The Council will seek to secure the preservation, restoration and continued use of buildings of special architectural or historic interest. When applications for planning permission relating to a listed building or listed building consent are being assessed, the primary consideration will be the need to preserve or enhance the fabric and character of the building. Permission or consent will not be granted unless it has	ES Volume I Chapter 15 (Cultural Heritage) (Application Document Ref. 6.3.15) identified 38 Listed Buildings within the study area. The effects of the construction of the Proposed Development on these assets were found to be not significant. Due to the scale of the Proposed
		been demonstrated that the proposed works would secure this objective. The Council will encourage the retention and restoration of	Development, it is envisaged that opportunities to provide effective landscape screening will be limited. Therefore, the



Policy	Policy Document	Policy Text	Assessment
		the historic setting of listed buildings. Proposals which damage the setting of a listed building will be resisted. Whenever appropriate, proposals which would entail the loss of historic fabric from a listed building will be conditional upon a programme of recording being agreed and implemented.	residual effects of the Proposed Development during operation in relation to impacts resulting from change to the setting of Listed Buildings would be the same as during the construction phase.
HE9 – Archaeological Evaluation	Local Plan	<ul> <li>Where development proposals affect sites of known or suspected archaeological importance, an archaeological assessment to be submitted prior to the determination of a planning application will be required. Planning permission will not be granted without adequate assessment of the nature, extent and significance of the remains present and the degree to which the proposed development is likely to affect them.</li> <li>Sites of known archaeological importance will be protected. When development affecting such sites is acceptable in principle, mitigation of damage must be ensured and the preservation of the remains in situ is a preferred solution. When in situ preservation</li> </ul>	The magnitude of impact for most of the below ground archaeological remains reported under construction phase effects has been assessed as no impact or a low magnitude of impact, resulting in a neutral effect or minor adverse effect, which are not EIA significant. As such, there are no significant residual effects for these assets. The magnitude of potential impact for the possible partial enclosures [AECOM3333] and [AECOM3334] has been assessed as high, resulting in a major adverse effect, which is EIA significant. Appropriate recording of archaeological remains prior to and during construction through archaeological evaluation and mitigation would allow any below ground



Policy	Policy Document	Policy Text	Assessment
		and recording before and during development.	impact on individual assets, resulting in a residual minor adverse effect, which is not significant.
DS1 – General Requirements	Local Plan	<ul> <li>A high standard of design is expected in all developments in both built-up areas and the countryside and proposals for poorly designed development will be refused. All proposals will be considered against the criteria set out below:</li> <li>Quality of Design <ol> <li>i) The design and external appearance of the proposal should reflect or enhance the character, appearance and setting of the immediate area; and</li> <li>the design and layout should respect and where possible retain and/or enhance the existing landform of the site.</li> </ol> </li> </ul>	The Proposed Development is considered to be of a high standard, and further information on the design, including the design evolution can be found in the Design and Access Statement ( <b>Application Document Ref.</b> <b>5.6</b> ). The Proposed Development is considered to meet all of the listed criteria and further information is provided in the relevant chapters of ES Volume I ( <b>Application Document Ref. 6.2</b> ). Other design and amenity related proposals are set out in the Landscape and Biodiversity Management and Enhancement Plan ('LBMEP') ( <b>Application Document Ref.</b> <b>5.10</b> ), Indicative Lighting Strategy ( <b>Application Document Ref. 5.11</b> ), and Framework Construction Environmental Management Plan ( <b>Application Document Ref. 7.1</b> ), compliance with all of which is secured in requirements in the Draft DCO ( <b>Application Document Ref. 2.1</b> ).



Policy	Policy Document	Policy Text	Assessment
		3. No unacceptable loss of amenity to neighbouring land uses should result in terms of noise, smell, fumes, dust or other nuisance, or through the effects of overlooking or overshadowing; and	
		<ol> <li>amenity open space in the area should be retained, wherever possible; and</li> </ol>	
		<ol> <li>no pollution of water, air or land should result which poses a danger or creates detrimental environmental conditions.</li> </ol>	
		Where appropriate, conditions will be imposed requiring the provision of landscaping to enhance new development.	
		Conservation	
		6. There should not be an adverse effect on features of acknowledged importance, on or surrounding, the site, including species of plants and animals of nature conservation value (particularly species protected by	



Policy	Policy Document	Policy Text	Assessment
		Schedules 1, 5 and 8 of the Wildlife and Countryside Act 1981), Scheduled Ancient Monuments, archaeological remains, listed buildings and Conservation Areas or trees and woodland covered by Tree Preservation Orders; and	
		<ol> <li>the development must ensure the retention of those existing site features that make an important contribution to the character or amenity of the site or the surrounding area; and</li> </ol>	
		<ul> <li>8. development proposals should include the results of archaeological assessment, where appropriate, and adequate measures to ensure that there would be no unacceptable impacts on archaeological remains. Conditions will be imposed to secure suitable mitigation at the appropriate time in the development process.</li> <li>Resources</li> </ul>	



Policy	Policy Document	Policy Text	Assessment
		9. ix) There should be no conflict with an allocated or approved land-use proposal in the locality nor should the reasonable potential for development of a neighbouring site be prejudiced; and	
		10. the location and design of developments on the urban fringe (sites adjoining settlement development limits) should take into account the need to minimise the impact of the development on adjoining agricultural land or other countryside interests; and	
		11.measures to conserve energy will be expected in:	
		a. the design, orientation and layout of buildings; and	
		<ul> <li>b. the location of development; and improvements to the transport network and in the management of traffic.</li> </ul>	
		Utilities and Services	



Policy Document	Policy Text	Assessment
	12. There should be no reliance on public finances being available to provide infrastructure and services; and	
	13. suitable on-site drainage should be provided and where there are off-site drainage problems the developer will be expected to overcome them.	
Local Plan	In the case of proposals for development on land known or strongly suspected as being contaminated, applicants will be required to demonstrate that the level of contamination can be overcome by remedial measures or improvements.	Chapter 13 (Geology, Hydrogeology and Land Contamination) of the ES Volume I ( <b>Application Document Ref. 6.2.13</b> ) addresses the potential effects of the construction, operation (including maintenance) and decommissioning of the Proposed Development on geology,
	Permission will only be granted on contaminated sites where a detailed site survey has been submitted, and a suitable scheme of remedial measures has been agreed to overcome any existing contamination. Conditions will be imposed and/or a planning obligation entered into to secure the implementation of such a scheme at the appropriate time in the development	hydrogeology and land contamination (considering effects to and from any existing contamination and also any potential to cause contamination). It found that effects related to potential geological and land contamination related impacts associated with the Proposed Development during the construction, operation and decommissioning periods are likely to be negligible or minor adverse (not significant).
		12. There should be no reliance on public finances being available to provide infrastructure and services; and13. suitable on-site drainage should be provided and where there are off-site drainage problems the developer will be expected to overcome them.Local PlanIn the case of proposals for development on land known or strongly suspected as being contaminated, applicants will be required to demonstrate that the level of contamination can be overcome by remedial measures or improvements.Permission will only be granted on contaminated sites where a detailed site survey has been submitted, and a suitable scheme of remedial measures has been agreed to overcome any existing contamination. Conditions will be imposed and/or a planning obligation entered into to secure the implementation of such a scheme



Policy	Policy Document	Policy Text	Assessment
DS10 – New Hazardous Installations and Pipelines	Local Plan	Planning permission for development which involves the storage of materials or the carrying out of processes that are toxic, highly reactive, explosive or highly flammable will only be granted if the applicant can demonstrate that the proposal will impose no significant development restrictions upon surrounding land users; will not put at risk surrounding residential properties; or prove a risk to other premises in the locality where significant numbers of people regularly congregate.	Requirement 15 'Contaminated land and groundwater' of Schedule 2 of the draft DCO ( <b>Application Document Ref. 2.1</b> ) secures details of a scheme to deal with the contamination of land including ground water, which is likely to cause significant harm to person or pollution of controlled waters or the environment. The Applicant is preparing an application for submission to the hazardous substances authority for confirmation on substances that will require Hazardous Substances Consent. Further information on this is provided in the Schedule of Other Consents and Licenses ( <b>Application Document Ref. 5.4</b> ). The various pipelines will be manufactured and installed so as to fully comply with relevant legislation including the Pressure Equipment (Safety) Regulations 2016 (HM Government, 2016a) and the Pipelines Safety Regulations (PSR) (HM Government, 1996) and all other relevant standards in order to ensure that risks are ALARP.
DS11 – Polluting Activities	Local Plan	Planning permission for development, including extensions to existing premises and changes of use, will only be permitted	It is demonstrated that the levels of potentially polluting emissions do not pose a danger. Furthermore information is provided



Policy	Policy Document	Policy Text	Assessment
		where it can be demonstrated that the levels of potentially polluting emissions, including effluent, leachates, smoke, fumes, gases, dust, steam, smell or noise do not pose a danger by way of toxic release; result in land contamination; pose a threat to current and future surface or underground water resources; or create adverse environmental conditions likely to affect nearby developments and adjacent areas.	in ES Volume I Chapter 8 (Air Quality, Chapter 9 (Noise and Vibration), Chapter 11 (Biodiversity and Nature Conservation), Chapter 12 (Water Environment and Flood Risk), and Chapter 13 (Geology, Hydrogeology and Land Contamination) ( <b>Application Document Ref. 6.2</b> ). Air emissions would primarily be regulated through the Environmental Permit, the status of which is described in the Schedule of Other Consents and Licenses (Application Document Ref. 5.4).
DS12 – Light Pollution	Local Plan	Planning applications which involve light generating development including floodlighting will only be permitted where it can be demonstrated that there would be no adverse impact on local amenities.	The application is accompanied by an Indicative Lighting Strategy (Application Document Ref. 5.11) and Requirement 7 of Schedule 2 of the draft DCO (Application Document Ref. 2.1) states that no part of the authorised development may be commissioned until a scheme for all permanent external lighting has been submitted to and approved by the local planning authority.
DS13 – Groundwater	Local Plan	All development proposals must take account of the need to secure effective land drainage measures and ground water	The Proposed Development is considered to take account of the need to secure effective land drainage measures and ground water



Policy	Policy Document	Policy Text	Assessment
Protection and Land Drainage		protection in order to control the level of water in the land drainage System.	protection as set out in ES Volume I Chapter 12 (Water Environment and Flood Risk) ( <b>Application Document Ref 6.2.12</b> ) and ES Volume II Appendix 12A: Flood Risk Assessment.
DS14 – Foul Sewage and Surface Water Drainage	Local Plan	The Council will require satisfactory provision to be made for the disposal of foul and surface water from new development, either by agreeing details before planning permission is granted, or by imposing conditions on a planning permission or completing planning agreements to achieve the same outcome.	Requirements 12 and 13 of Schedule 2 of the Draft DCO ( <b>Application Document Ref.</b> <b>2.1</b> ) require that no part of the development commence until details of surface water drainage and foul water drainage systems are submitted to and approved by the local planning authority. Requirement 12 stipulates that the permanent surface water drainage must be in accordance with the Indicative Surface Water Drainage Plan ( <b>Application Document Ref. 4.13</b> ).
DS15 – Water Resources	Local Plan	Development will not be permitted which would adversely affect the quality and quantity of water resources or adversely affect nature conservation, fisheries and amenity by means of: 1. pollution from the development; or	Requirements 12 'Surface water drainage' and 13 'Foul water drainage of Schedule 2 of the draft DCO ( <b>Application Document Ref.</b> <b>2.1</b> ) secures details of temporary surface water and drainage systems, including means of pollution control for the construction phase of the Proposed Development in accordance with the Construction Environment Management



Policy	Policy Document	Policy Text	Assessment
		2. water abstraction unless adequate measures are undertaken to reduce the impact to an acceptable level.	Plan (CEMP). The CEMP is secured by Requirement 17. Requirement 15 'Contaminated land and groundwater' secures details of a scheme to deal with the contamination of ground water, which is likely to cause significant harm to person or pollution of controlled waters or the environment.
			If the canal abstraction option is selected by the Applicant then this would be subject to an agreement with Canal and River Trust regulating its use and Canal and River Trust would agree relevant environmental controls with the Environment Agency. If the less preferred river option were used for the water abstraction then a variation of (i.e. taking over) the Keadby 1 Power Station abstraction licence would be sought rather than an additional abstraction. Further information on the other consents required for abstraction are set out in the Schedule of Other Consents and Licenses ( <b>Application</b> <b>Document Ref. 5.4</b> ).
DS16 – Flood Risk	Local Plan	Development will not be permitted within floodplains where it would:	Chapter 12 'Water Environment and Flood Risk' of the ES Volume I ( <b>Application</b>



Policy	Policy Document	Policy Text	Assessment
		<ol> <li>increase the number of people or buildings at risk; or</li> <li>impede the flow of floodwater; or</li> <li>impede access for the future maintenance of watercourses; or</li> <li>reduce the storage capacity of the floodplain; or</li> <li>increase the risk of flooding elsewhere; or</li> <li>undermine the integrity of existing flood defences</li> <li>unless adequate protection or mitigation measures are undertaken.</li> </ol>	<b>Document Ref. 6.2.12</b> ) provides an assessment of likely significant effects on the water environment and flood risk as a result of construction, operational and decommissioning phases of the Proposed Development. A site-wide Flood Risk Assessment ('FRA') is provided at Appendix 12A of ES Volume IIII (Document Ref. 6.3.20). In terms of fluvial flood risk, the entire Proposed Development Site is within Flood Zone 3. However, the flood defences are sufficient to prevent overtopping during events with a 0.5% annual probability, the overall sensitivity to fluvial flooding is therefore considered 'Low'.



Policy	Policy Document	Policy Text	Assessment
			The location comprises largely previously
			developed land and the Proposed
			Development provides extensive wider
			sustainability benefits due to its role in
			providing high amounts of low carbon
			electricity generation consistent with the
			urgent need identified in NPS EN-1
			paragraph 3.3.15 and which is corroborated
			by recent policy in the EWP and recent
			official evidence from the CCC and NIC.
			The Proposed Development therefore
			satisfies the Exception Test, with ES Volume I Chapter 12, (Water Environment and Flood
			Risk) (Application Document Ref. 6.2.12)
			and ES Volume II Appendix 12A: Flood Risk
			Assessment ( <b>Application Document Ref.</b>
			<b>6.3.20</b> ) demonstrating that it would be safe
			and not result in significant effects in terms
			of flooding. The EA has reviewed the Flood
			Risk Assessment undertaken by the
			Applicant at various stages pre application.
			Details of the flood risk mitigation measures
			detailed within the DCO Application will be
			secured by Requirement 14 'Flood risk
			mitigation' of the draft DCO (Application
			<b>Document Ref. 2.1</b> ). Details of surface and



Policy	Policy Document	Policy Text	Assessment
			foul water drainage (taking account of flood risk mitigation) will be secured by Requirements 12 and 13 respectively.
DS17 – Overhead Power Lines and High Powered Electrical Installations	Local Plan	The Council will seek to minimise the environmental effects of proposals for overhead power lines of 132kv or over, and high-powered electrical installations. The Council will not support such development within or in locations where the development would have a detrimental impact upon the following areas: i) Special Protection Areas, Special Areas of Conservation and Ramsar sites; ii) SSSIs or other statutory nature conservation sites; iii) Conservation Areas and sites and buildings of historic or archaeological interest, including listed buildings and scheduled monuments; iv) existing committed or allocated housing areas. In view of the substantial practical, technical and cost disadvantages involved, it is only in exceptional circumstances that the Council will seek to have lines placed underground, where this is not damaging to sites of nature	No new overhead lines are proposed as part of the works required for the Proposed Development. The existing electrical infrastructure in the area comprises 132 kilovolt (kV) and 400 kV overhead lines as well as underground cables that serve existing substations. The Proposed Development includes overground or underground electrical power export lines from the Low Carbon Gas Power Station to the existing 400kV National Grid Electricity Transmission (NGET) Substation located adjacent to Keadby Power Station, including works within the substation (which would be undertaken by NGET); and up to 132 kilovolt underground electrical cables to the Low Carbon Gas Power Station from the existing Northern Powergrid Substation located at Chapel Lane, including works within the substation, for the supply of electricity at up to 132kV to the Proposed PCC Site.



Policy	Policy Document	Policy Text	Assessment
		conservation value or archaeological importance. Careful line routing will usually be the most appropriate way to minimise the visual impact of high voltage power lines.	
		To ensure a satisfactory built environment the Council will have regard to the amenity of potential future occupiers in determining applications for development close to overhead power lines.	



# 6.7 Regulation 19 Publication Draft of the North Lincolnshire Emerging Local Plan

- 6.7.1 With regards to the Regulation 19 Publication Draft of the North Lincolnshire Emerging Local Plan, within the spatial vision it is stated that "Our economy will be strong and diverse; part of an energy corridor stretching east to west, (encompassing energy production and consumption, steel and process engineering, chemicals and associated logistics) and a food belt corridor from north to south (encompasses growing, logistics, processing and research and development)."
- 6.7.2 Policy RD1p (Supporting Sustainable Development in the Countryside) states some types of infrastructure may be required in the countryside to support the achievement of the Plan's objectives. Energy development would be supported in a countryside location where it is required for operational reasons.
- 6.7.3 Although North Lincolnshire Council have stated in the Local Impact Report [REP1-022] that they do not consider the new Local Plan to be a relevant consideration in the determination of this DCO application (see paragraph 5.3.45 of this document), in the Applicant's Statement of Common Ground with North Lincolnshire Council (REP1-007) it was agreed that the North Lincolnshire's draft Local Plan is not discouraging of the principle of new energy generating infrastructure at this Site.





#### 6.8 Summary

- 6.8.1 This section of the Planning Statement has considered the Proposed Development's conformity against the assessment principles, generic impacts and assessment and technology specific consideration of the relevant energy NPSs (EN-1, EN-2, EN-4 and EN-5) and the MPSs (the UK MPS and the East Inshore and Offshore Marine Plans). These are the primary basis for the determination of development consent applications for energy infrastructure. The Applicants' assessment has not identified any conflicts with NPS and MPS policy. Furthermore, it has been demonstrated that there is no conflict with NPPF policy or local planning policy.
- 6.8.2 It is important to recognise that although the NPPF and local development plan policy may be 'important and relevant', the NPSs and MPSs are the primary consideration for the determination of NSIPs and take precedence where there is any conflict with such policies.





## 7.0 ASSESSMENT OF THE BENEFITS AND ADVERSE IMPACTS OF THE PROPOSED DEVELOPMENT

#### 7.1 Introduction

7.1.1 This section of the Planning Statement identifies the key benefits of the Proposed Development as well as its likely significant operational (permanent) adverse effects having regard to the policy assessment within **Section 6** and the EIA that has been undertaken.

#### 7.2 Benefits of the Proposed Development

- 7.2.1 The Proposed Development would have a number of very clear and substantial benefits, which can be summarised as follows:
  - The Proposed Development is a major investment by the Applicant in low carbon electricity generation and could be deployed by the mid 2020s, providing 910MW (gross capacity) of dispatchable generation for 25 years or more, a significant contribution towards the urgent national need for low carbon electricity generation established in NPS EN-1 paragraph 3.3.15 and which has become more urgent following the coming into law of the Climate Change Act 2008 (2050 Target Amendment) Order 2019, i.e. Net Zero by 2050, and is corroborated by recent official evidence including the National Infrastructure Assessment (The National Infrastructure Commission, 2018), and Reducing UK emissions: 2020 Progress Report to Parliament (Committee for Climate Change, 2020).
  - The Proposed Development would connect into and act as an important enabler of the Zero Carbon Humber cluster, and would help deliver Government policies and commitments on CCUS and "Superplaces" set out in the EWP (HM Government, 2020a), and Point 8 of the Ten Point Plan for a Green Industrial Revolution (HM Government, 2020b) where renewable energy, CCUS and hydrogen technologies could agglomerate and generate significant numbers of jobs.
  - The Proposed Development represents a considerable commitment to removing barriers to carbon capture, and deploying carbon capture and compression infrastructure, and exceeds relevant policy requirements (NPS EN-1 section 4.7 and NPS EN-2 section 2.3). Carbon capture and compression equipment would be installed from the outset on all of the generating capacity, with relevant matters secured by requirements in Schedule 2 of the Draft DCO and further controlled under the Environmental Permit that will be obtained for the Proposed Development.
  - The site has excellent proximity to the Humber estuary and will connect into the Zero Carbon Humber CCUS cluster. Large parts of the Site are within the ownership or control of the Applicant and the generating station would be situated on brownfield land adjoining and within an existing power station with existing electricity grid, gas supply, and cooling water supply





infrastructure, thereby minimising the need for new connections and third party land. The location affords important efficiencies in terms of the operation and maintenance of the Proposed Development, also potentially reducing land and staffing (trip generation) compared to a development not situated at an existing power station.

- The parameters assessed in the ES and secured in the Draft DCO provide an appropriate degree of flexibility, allowing for the future connection to the ZCH cluster and allowing for unforeseeable technological advancements and efficiencies to be incorporated in the final design. This is of relevance both to the CCGT (Work No. 1A), which historically have gained in efficiency electrical output for a given fuel input) year on year) and other components such as the Carbon Capture Plant (Work No. 1C) where the licensor and technology choice would be made post consent. A seven year duration of planning powers, as provided for in requirement 2 in Schedule 2 of the Draft DCO, strikes the appropriate balance of preserving viability and encouraging timely commencement of development.
- Significant beneficial local and regional impacts would result from the direct, indirect and induced employment created by the construction phase of the Proposed Development on the Scunthorpe Travel to Work Area (TTWA) and associated economy, as identified in Chapter 16: Socio-economics of the ES Volume II (Application Document Ref. 6.2).

### 7.3 Adverse Effects of the Proposed Development

- 7.3.1 The Proposed Development would give rise to a small number of unavoidable adverse effects of significance, as identified in Chapter 20: Summary of Likely Residual Effects of ES Volume I (**Application Document Ref. 6.2**), and adverse performance against planning policy:
  - During construction, and during operation and decommissioning in the event that the Keadby 1 power station structures are not present, there would be moderate or major adverse visual amenity effects for residents at Viewpoint 1 (Chapel Lane West, Keadby), Viewpoint 2 (Gate Keepers Residence, Vazon Bridge, Keadby) and users of the canal and towpath at viewpoint 2. In the event that Keadby 1 structures are still present, then during operation and decommissioning there would be adverse visual amenity effects on residents at viewpoint 6 (Truck Road, Keadby) during operation. These are considered unavoidable due to the scale of the required structures. Full mitigation is not possible. The Landscape and Biodiversity Management and Enhancement Plan (LBMEP) (Application **Document Ref. 5.10)** accompanies the DCO application which presents proposals for planting, although such planting would not reduce the significance of visual effects at these locations. The Design Principles Statement, in Appendix 1 of the Design and Access Statement (Application Document Ref. 5.6), sets out potential additional measures that could be





undertaken by the Applicant in relation to colour and materials of the generating station (**Work No. 1**) as well as **Work No. 8**, and compliance is secured by Requirement 5 in Schedule 2 of the Draft DCO.

- 7.3.2 The Proposed Development is located in open countryside and parts of the temporary works (parts of Work No. 9A) are located on higher grades of agricultural land. While this is not precluded by NPS policy, local policy sets criteria for the development of such land, and this could be important and relevant in decision making under S104 of the 2008 Act. However as demonstrated in Section 6 of this Planning Statement, the Proposed Development is consistent with these criteria, as it constitutes a form of economic development at an existing established employment site, it would be unsuitable within the development boundaries of North Lincolnshire's towns, and it will be located largely on previously used land and making use of existing structures and infrastructure, consistent with the NLC spatial strategy policy on rural development. It is located in an area already characterised by substantial power infrastructure including overhead lines and will not be out of keeping with the character of the area. Appropriate controls have been included, notably the maximum dimensions of larger structures, and the gatehouse adjoining the A18, being controlled via Schedule 11 of the Draft DCO (Application Document Ref. 2.1). In addition, screening and landscaping proposals are set out in a Landscape and Biodiversity Management and Enhancement Plan ('LBMEP') (Application Document Ref. 5.10). The Design and Access Statement (Application Document Ref. 5.6) includes design principles and explains how the use of greenfield and agricultural land for temporary construction purposes was minimised through a selection process that maximised the use of brownfield land. A Soil Resources Survey will be covered in the final CEMP, as controlled by Requirement 17 of Schedule 2 of the draft DCO (Application Document Ref. 2.1).
- 7.3.3 The Proposed Development is located in Flood Zone 3 (fluvial flood risk). However, the flood defences are sufficient to prevent overtopping during events with a 0.5% annual probability, the overall sensitivity to fluvial flooding is therefore considered 'Low'. The location comprises largely previously developed land and the Proposed Development provides extensive wider sustainability benefits due to its role in providing high amounts of low carbon electricity generation consistent with the urgent need identified in NPS EN-1 paragraph 3.3.15 and which is corroborated by recent policy in the EWP and recent official evidence from the CCC and NIC. The Proposed Development therefore satisfies the Exception Test, with ES Volume I Chapter 12, (Water Environment and Flood Risk) (Application Document Ref. 6.2.12) and ES Volume II Appendix 12A: Flood Risk Assessment (Application Document Ref. 6.3.20) demonstrating that it would be safe and not result in significant effects in terms of flooding. The EA has reviewed the Flood Risk Assessment at various stages pre-application.





#### 7.4 The Planning Balance

- 7.4.1 This section has identified a number of very clear and substantial benefits that the Proposed Development would deliver and enable. The NPS EN-1 and NPS EN-2 identifies that many of these types of benefit are to be given substantial weight. The benefits are appropriately secured in the DCO.
- 7.4.2 In contrast, few significant adverse effects have been identified which are unavoidable and arise due to the scale of the Proposed Development, which its electricity generation and carbon capture functions render inevitable, and the low-lying nature of the Site.
- 7.4.3 The suitability of the Site is clear given that it is to be served by a carbon capture gathering network being developed by National Grid Carbon, has a range of existing grid and infrastructure connections available, and large parts are of brownfield and industrial character and in the ownership of the Applicant.
- 7.4.4 It is therefore considered that the benefits of the Proposed Development considerably outweigh its limited adverse impacts.





## 8.0 CONCLUSIONS

- 8.1.1 Decisions on DCO applications where a National Policy Statement (NPS) is designated are made against the criteria in Section 104 of the 2008 Act. Section 8 sets out conclusions corresponding to the criteria in Section 104 subsection (2)(a)-(d) and subsections (3)-(9).
- 8.1.2 The Proposed Development has been demonstrated, in **Section 6** to be in conformity with the relevant NPSs. In particular:
  - the need case set out in NPS EN-1 for all types of energy infrastructure, including low carbon electricity generating infrastructure, has been demonstrated to be of particular urgency and relevance by reference to a range of recent Government energy and climate change law, policy and guidance. The Proposed Development will contribute in a timely manner to this urgent need;
  - the Proposed Development is in conformity with all relevant 'generic impacts' and 'assessment and technology specific considerations' in the NPSs, as detailed in Section 6, and Tables 6.2 and 6.3, including in respect of air quality and emissions, biodiversity and geological conservation, sources of potential nuisance, flood risk, historic environment, landscape and visual, land use, noise and vibration, socio-economic, traffic and transport, waste management, water quality and resources, site selection, pipeline safety, soil and geology, and EMFs, by reference to the findings in the Environmental Statement Volumes I-III (Application Document Refs, 6.2 6.4) and other application documents.
  - The conformity with the UK Marine Policy Statement and the East Inshore and East Offshore Marine Plans is confirmed in **Table 6.4**.
- 8.1.3 Other matters important and relevant to the acceptability of the Proposed Development include the overarching aims of the National Planning Policy Framework and the Local Plan. **Tables 6.5** and **6.6** of **Section 4** confirm that the Proposed Development appropriately addresses these matters.
- 8.1.4 It is important and relevant that the Proposed Development would connect into the Zero Carbon Humber cluster, and the delivery of Government policies and commitments on CCUS and "Superplaces" set out in the EWP (HM Government, 2020a), and Point 8 of the Ten Point Plan for a Green Industrial Revolution (HM Government, 2020b) where renewable energy, CCUS and hydrogen technologies could agglomerate and generate significant numbers of jobs.
- 8.1.5 No other laws, statutory duties or enactments indicate against making the DCO. The Habitats Regulations Assessment Screening Report (Application Document Ref. 5.21), Water Framework Directive Assessment (Application Document Ref. 6.3.21), PINS Transboundary Screening Matrix (Application Document Ref. 6.3.4) do not present concerns. The Statement of Reasons





(Application Document Ref. 3.2) demonstrates that all reasonable alternatives to compulsory acquisition have been explored, and the proposed interference with the rights of those with an interest in the Order Land is necessary, proportionate and legitimate. No serious detriment to statutory undertakers would arise and appropriate protective provisions are included in the Order.

- 8.1.6 The Proposed Development has a number of clear and substantial benefits, which NPS EN-1 accords weight, and which considerably outweigh its limited adverse impacts, as set out in **Section 7**.
- 8.1.7 The DCO includes appropriate requirements (Schedule 2) and conditions in the Deemed Marine Licence (Schedule 13) that would control the detailed design of the Proposed Development and its construction and operation in order to ensure that it accords with the robust assessment reported in the Environmental Statement Volumes I-III (Application Document Refs, 6.2 6.4) and would not result in unacceptable effects.
- 8.1.8 It is submitted that the Proposed Development conforms with the criteria in **Section 104** of the 2008 Act and is acceptable in all relevant respects, and a DCO should therefore be made by the Secretary of State.





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