

Net Zero Teesside Project

Planning Inspectorate Reference: EN010103

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

The Net Zero Teesside Order

Document Reference: 3.2 Statement of Reasons

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulations 5(2)(h) and 5(2)(n)



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

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GLOSSARY

Abbreviation	Description
Applicants	Means, together, Net Zero Teesside Power
	Limited and Net Zero North Sea Storage Limited.
Application	The Application for a Development Consent Order made to the Secretary of State under Section 37 of PA 2008 in respect of the Project, required pursuant to Section 31 of the PA 2008 because the Project is a Nationally Significant Infrastructure Project under Section 14(1)(a) and Section 15 of PA 2008 by virtue of being an onshore generating station in England or Wales of electrical capacity of more than 50 Megawatts and by direction under sections 35(1) and 35ZA of PA 2008 and associated development under
	section 115(1)(b) of that Act.
BEIS	Department for Business, Energy and Industrial Strategy
CA Guidance	Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land' (Department for Communities and Local Government, September 2013)
CCGT	Combined cycle gas turbine
CCR	Carbon Capture Ready.
CCS	Carbon Capture and Storage.
CCUS	Carbon Capture Utilisation and Storage

CO ₂ Conditioning and LP Compressor	The gas CO ₂ stream from the capture plant will be
Station	saturated with water and will contain traces of
	oxygen which will need to be reduced in a gas
	conditioning facility at the emitter sites prior
	export to the CO ₂ Gathering Network.
CO ₂ Export Pipeline or CO ₂ Export	High pressure CO ₂ export pipeline. CO ₂ export is
	expected to include an on-shore high pressure
1	Compressor Station located adjacent to the
	Power and Capture plant, and the
	commencement of an export pipeline to the off-
	shore elements of the NZT development. The
	offshore elements will be separately consented
	and do not form part of the Proposed
	Development – including the off-shore portion of
	the CO ₂ Export Pipeline, the CO ₂ store itself and
	CO ₂ injection wells into the store and the
	associated off-shore infrastructure (either
	platform or subsea or combination thereof).
CO ₂ Gathering Network or CO ₂	Gaseous Phase CO ₂ Gathering Network
_	connecting various industrial installations across
	the Tees Valley. The CO ₂ Gathering Network will
	predominantly use an existing above ground pipe
	network route running along existing pipe racks
	and using existing culverts and overbridges,
	however it may be necessary to install the pipe
	below ground if pipe racks are not available.
DCO	A Development Consent Order made by the
	relevant Secretary of State pursuant to PA 2008
	to authorise a NSIP. A DCO can incorporate or
	remove the need for a range of consents which
	would otherwise be required for a development.
	A DCO can also include powers of compulsory
	acquisition.
EIA	Environmental Impact Assessment. The
	assessment of the likely significant environmental
	effects of a development, undertaken in
	accordance with the Infrastructure Planning
	(Environmental Impact Assessment) Regulations
	2017 (as amended).
Electrical Connection Corridor	Power export lines from the power station to the
	national transmission system to support the

	Proposed Development. The existing electrical infrastructure in the area comprises 275 kilovolt (kV) and 400 kV overhead lines as well as lower voltage underground cables that serve, amongst others, three substations. The size, timing and location of the connection to the national electricity transmissions system will be determined in consultation with National Grid.	
Electricity Generating Station	Has the same meaning as Low-Carbon Electricity Generating Station	
EN-1	The Overarching National Policy Statement for Energy, Department of Energy and Climate Change, 2011.	
EN-2	The National Policy Statement for Fossil Fuel Electricity Generating Infrastructure, Department of Energy and Climate Change, 2011.	
EN-4	The National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines, Department of Energy and Climate Change, 2011.	
EN-5	The National Policy Statement for Electricity Networks Infrastructure, Department of Energy and Climate Change, 2011.	
ES	The Environmental Statement, documenting the findings of the EIA.	
HGV	Heavy Goods Vehicles	
Land Plans	A plan showing the land that is required for the Project and over which interests or rights in land are sought as part of the Order.	
Limits of deviation	The limits shown on the Works Plans within which the Project may be built.	
Low-Carbon Electricity Generating Station or Electricity Generating Station	A new build low-carbon gas-fired generating station with associated carbon capture plant, low pressure CO ₂ compression and associated utilities and buildings (Work No. 1), comprising:	
	Combined Cycle Gas Turbine (CCGT) Plant;Cooling Infrastructure for the CCGT;	

MLWS Natural Gas Connection Corridor	 Carbon capture and low pressure compression plant for the CCGT; and Administration, control room and stores. Mean Low Water Springs. Natural gas pipeline to supply the power station to support the Proposed Development. Natural gas will be used as the fuel for the operation of the Combined Cycle Gas Turbine (CCGT) power station. Subject to agreement with National Gas Grid, natural gas will be supplied via a tie-in to the high pressure gas transmission network in the area.
NPS	National Policy Statement.
NSIP	A Nationally Significant Infrastructure Project that must be authorised by the making of a DCO under PA 2008.
NZT	Net Zero Teesside, a term used to describe the wider project, as described in Section 2 of this Statement of Reasons.
NZT Power	Net Zero Teesside Power Limited.
NZNS Storage	Net Zero North Sea Storage Limited
Open Space Land	The parts of the Order Land which are open space, shown hatched blue on the Land Plans and identified in the Book of Reference.
Order	The Net Zero Teesside Order, being the DCO that would be made by the Secretary of State authorising the Project, a draft of which has been submitted as part of the Application.
Order Land	The land over which powers of compulsory acquisition are sought in the Order.
Order Limits	The limits of the land to which the Application for the Order relates and shown on the Land Plans and Works Plans, within which the Project must be carried out and which is required for the construction and operation of the Project.
PA 2008	The Planning Act 2008 which is the legislation in relation to applications for NSIPs, including pre-

	application consultation and publicity, the examination of applications and decision making
	by the Secretary of State.
PEIR	Preliminary Environmental Information Report.
PINS	The Planning Inspectorate. A Government agency responsible for receiving and administering the acceptance and examination of applications for NSIPs on behalf of the Secretary of State.
Power, Capture and Compression (PCC) Site	The site for the new-build low carbon gas-fired power station with integrated carbon capture unit, low pressure compression and associated utilities and buildings.
Project or Proposed Development	The development to which the Application relates and which requires a DCO, and as listed at Schedule 1 to the Order.
RCBC	Redcar and Cleveland Borough Council
Requirements	The 'requirements' at Schedule 2 to the Order that, amongst other matters, are intended to control the final details of the Project as to be constructed and also to control its operation, amongst other matters to ensure that it accords with the EIA and does not result in unacceptable impacts.
Site	The land corresponding to the Order Limits, encompassing the Order Land and which is required for the construction and operation of the Project.
Statement of Reasons	This document - a statement setting out the reasons and justification for the compulsory acquisition of land or rights in land within the Order Limits.
STBC	Stockton-on-Tees Borough Council
STDC	South Tees Development Corporation.
Water Discharge Connection Corridor	Disposal of treated effluent to Tees Bay subject to Environment Agency permitting requirements.
Water Supply Connection Corridor	A connection corridor to Northumbrian Water Ltd, for the provision of water for the Proposed Development. This is the preferred source of

	water subject to sufficient capacity being available.
Work No.	Work number, a component of the Project, described at Schedule 1 to the Order.
Works Plans	Plans showing the numbered works referred to at Schedule 1 to the Order and which together make up the Project.
WwTP	Wastewater treatment plant.

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1.0 **EXECUTIVE SUMMARY**

1.1.1 Purpose and Structure of this Statement of Reasons

- 1.1.2 This Statement of Reasons relates to the Application for a development consent order made by Net Zero Teesside Power Limited and Net Zero North Sea Storage Limited to the Secretary of State under the PA 2008 for powers to construct, operate and maintain the Project.
- 1.1.3 Following acceptance by the Planning Inspectorate of the Application on 16 August 2021, the Applicants notified the Examining Authority on 18 February 2022 that it intended to submit a request to change the Application [AS-043]. A request was subsequently submitted to the Examining Authority, and the Examining Authority accepted the proposed changes into the Examination by a Procedural Decision dated 6 May 2022. There were thirteen changes (the 'Proposed Development changes'), some of which resulted in changes to the Order Limits across the Proposed Development Site as described in the Applicants' notification of the proposed changes report [AS-044]. An update to the environmental impact of the Proposed Development changes was provided in the ES Addendum (Document Ref. 7.8.1 and 7.8.2).
- 1.1.4 The Proposed Development changes arose from ongoing design development by the Applicants given the 'First of a Kind' nature of the Proposed Development, the land interests within the Order Limits and the degree of optionality within the Application. Since submission the Applicants have continued to engage with Interested Parties with a view to addressing comments and agreeing common ground, while also continuing with preliminary design studies. A consultation on the Proposed Development changes was carried out by the Applicants between 10th March and 14th April 2022. Further details of the consultation activities and feedback received is contained in the Consultation Statement submitted with the Change Application (Document Ref. 7.6).
- 1.1.5 The above-mentioned design development by the Applicants and engagement with Interested Parties, has continued following the request for the Proposed Development changes, resulting in a further request being submitted to the Examining Authority proposing changes to the Application (the 'Proposed Development further changes'). The Applicants notified the Examining Authority of their intention to submit the request for the Proposed Development further changes on 8 July 2022 [REP4-031]. The further changes relate to removing optionality included in the Application and a reduction in land take. The Applicants are proposing four changes, relating to: selection of the method of crossing the Tees for the CO2 Gathering Network (Work No. 6); selection of the Electrical Connection (Work No. 3A) routeing over the Tees Valley railway line within the Teesworks site; and reduction of temporary

possession land following progress made during Front End Engineering Design (FEED) and landowner discussions. An update to the environmental impact of the Proposed Development further changes is provided in a Second ES Addendum (Document Refs. 7.10, 7.11.1 and 7.11.2).

- 1.1.6 This Statement explains why it is necessary, proportionate and justifiable for the Application to seek powers of compulsory acquisition, and why there is a compelling case in the public interest for the Applicants to be granted these powers.
- 1.1.7 This Statement was updated since the Application to take into account the Proposed Development changes, and has now been further updated to take into account the Proposed Development further changes. The majority of the Proposed Development changes and all the Proposed Development further changes result in a reduction to the Order Limits or rights sought over the land interests.
- 1.1.8 The matters addressed in this Statement are summarised in this section. References to numbered sections or paragraphs are to sections or paragraphs of this Statement.

1.1.9 **Description of the Project (Section 3)**

- 1.1.10 The Project is set out in detail at Schedule 1 to the Order (Document Ref. 2.1), and the areas in which each component (the Work Nos.) may be constructed are shown on the Works Plans (Document Ref. 4.4).
- 1.1.11 The Project is split into 10 Work Nos. as follows:
 - Work No. 1 A new build low-carbon gas-fired generating station with associated carbon capture plant, low pressure CO₂ compression and associated utilities and buildings, comprising: Combined Cycle Gas Turbine (CCGT) Plant; cooling infrastructure for the CCGT; carbon capture and low pressure compression plant for the CCGT; and administration, control room and stores;
 - Work No. 2 Natural gas pipeline to supply the Low-Carbon Electricity Generating Station (Work No. 2A) and Above Ground Installation (Work No. 2B);
 - Work No. 3 A new electrical substation at Tod Point and extension works at the existing National Grid substation at Tod Point (Work No. 3B) and electrical power export lines from the Low-Carbon Electricity Generating Station to the new electrical substation at Tod Point, and the connection between that new substation and the National Grid

- Electricity Transmission System via the existing National Grid substation (Work No. 3A);
- Work No. 4 A connection corridor to public utility raw water supply infrastructure, for the provision of water for the Project;
- Work No. 5 Water discharge using an existing or replacement outfall and associated pipework for the discharge of treated effluent and surface water to Tees Bay (including a potential pipeline connection for transportation of process water to Bran Sands Waste Water Treatment Plant and return for discharge);
- Work No. 6 Gaseous phase medium pressure CO₂ Gathering Network for the purpose of connecting various industrial installations across the Tees Valley;
- Work No. 7 High pressure CO₂ compression facilities;
- Work No. 8 High pressure dense phase CO₂ Export Pipeline;
- Work No. 9 Temporary construction and laydown areas; and
- Work No. 10 Access and highway improvements.
- 1.1.12 In addition, Schedule 1 to the Order lists generic works which may be carried out anywhere within Work Nos. 1 to 10.
- 1.1.13 The Low-Carbon Electricity Generating Station together with the associated carbon capture and compression facilities are referred to as the "PCC Site".
- 1.1.14 During construction, HGV traffic will access/depart the PCC Site via an entrance on the A1053 Tees Dock Road and then using site roads north of Lackenby Steelworks to the PCC Site. The same access will be used for construction traffic for other connections in that area. It is anticipated that the bulk of HGV traffic will access Tees Dock Road, via A19 and A66 or A174. Access to the CO₂ Gathering Network and Natural Gas Connection Corridor north of the Tees will be via the A1185, A1046, A178, B1725, Cowpen Bewley Road, Nelson Road and Seaton Carew Road for both construction staff and HGVs.
- 1.1.15 During operation, the PCC Site would be accessed from the A1085 Trunk Road. Access routes to the Natural Gas Connection Corridor and CO₂ Gathering Network Corridor north of the River Tees are proposed via the A1046, Haverton Hill Rd, and B1275, and south of the River Tees are proposed via Sembcorp operated Wilton routes to enable access into the Dabholm Gut areas and utilising land managed by Anglo-American.

1.1.16 The Project is a 'First of a Kind' for this type of infrastructure project. Consequently, the design of the Project needs to incorporate a degree of flexibility in the technology used and the dimensions and configurations of buildings and structures to allow for the future selection of the preferred technology and contractor(s). There is also the need to retain optionality for various elements of the Project including options for water treatment and the Water Discharge Connection Corridor (use of existing or replacement outfall).

1.1.17 Description of the Site and Order Land (Section 4)

- 1.1.18 The Site boundary has an area of approximately 267.40 hectares (ha) and covers a wide area located within the administrative boundaries of Redcar and Cleveland Borough Council to the south of the River Tees (South Bank and Dormanstown Wards) and in Stockton-on-Tees Borough Council to the north of the River Tees (Billingham South Ward). A portion of the Site to the south of the Tees also lies within the Teesworks area.
- 1.1.19 The Order Land (the area in which powers of compulsory acquisition are sought) covers the entire Site because the Applicants may need to compulsorily acquire the land, or new rights or occupy the land temporarily and therefore all areas of the Site are shown shaded pink, blue or yellow.
- 1.1.20 The Site is divided into the following areas:
 - The Power, Capture and Compression (PCC) Site;
 - CO₂ Export Pipeline;
 - Natural Gas Connection Corridor;
 - Electrical Connection Corridor;
 - Water Supply Connection Corridor;
 - Water Discharge Connection Corridor;
 - CO₂ Conditioning and LP Compressor Station; and
 - CO₂ Gathering Network Corridor.
- 1.1.21 The PCC Site has an area of approximately 42.5 ha (see Figure 3-1, ES Volume II, Document Ref. 6.3) and is located on the Teesworks site. This is land which was formerly part of the former Redcar Steelworks site, which would also contain parts of the various connections corridors which are part of the Project.
- 1.1.22 Both the Water Discharge Connection Corridor and the CO₂ Export Pipeline cross Coatham Dunes and Coatham Sands before continuing seaward. The

- Water Supply Corridor follows the route of the former Northumbrian Water feed to the former Redcar Steelworks site.
- 1.1.23 The other connections corridors pass through vacant land or existing utilities corridors to the south and north of the River Tees:
 - the Natural Gas Connection Corridor runs to the south of the PCC Site to allow a connection to the natural gas pipeline at the Sembcorp Pipeline at Bran Sands, and at Seal Sands between the Sembcorp Pipeline and National Gas Grid;
 - the Electrical Connection Corridor runs to the south of the PCC Site to allow connection for electricity export/import to/from the National Electricity Transmission System at Tod Point Substation; and
 - the CO₂ Gathering Network will allow the connection of current and potential future industries at Seal Sands and Billingham via a crossing of the River Tees to the PCC Site.

1.1.24 Compulsory Acquisition Powers (Section 5)

- 1.1.25 Section 120 of the PA 2008 provides that an order granting development consent may make provision relating to, or to matters ancillary to, the development for which consent is granted. Schedule 5 to the PA 2008 lists the matters ancillary to the development, which includes the acquisition of land, compulsorily or by agreement, and the creation, suspension or extinguishment of, or interference with, interests in or rights over land, compulsorily or by agreement.
- 1.1.26 Section 122 of the PA 2008 provides that an order granting development consent may include provision authorising the compulsory acquisition of land only if the Secretary of State, in respect of the Application, is satisfied that the land is required for the development to which the DCO relates and the land is required to facilitate or is incidental to that development.
- 1.1.27 The Secretary of State must also be satisfied that there is a compelling case in the public interest for the inclusion of powers of compulsory acquisition in the Order.

1.1.28 Need for the Compulsory Acquisition of Land and Rights (Section 6)

1.1.29 Under Section 122 of the PA 2008, compulsory acquisition powers may only be granted if the Secretary of State is satisfied that the land is required for the Project (or is required to facilitate it or is incidental to it), and if there is a compelling case in the public interest for inclusion of the powers.

- 1.1.30 The CA Guidance related to procedures for the compulsory acquisition of land (DCLG, September 2013) also states that: there must be a clear idea how the land to be acquired is to be used and it must be no more than is reasonably required; there must be compelling evidence that the public benefits would outweigh the private loss from the acquisition; all reasonable alternatives to compulsory acquisition should have been explored; there are reasonable prospects of the required funds for the acquisition being available; and that the purposes for which the land is sought are legitimate and sufficient to justify interfering with the human rights of affected people.
- 1.1.31 All of these matters are considered in this Statement, other than the availability of funding which is set out in the Funding Statement (Document Ref. 3.3).
- 1.1.32 The Applicants require powers of compulsory acquisition to ensure that the Project can be built, maintained and operated, and so that the Government's policies in relation to the timely delivery of new generating capacity and achieving ambitious net zero targets are met.

1.1.33 The powers sought are:

- All interests (including freehold) (Article 22 of the Order, Document Ref. 2.1) shown edged red and shaded pink on the Land Plans (Document Ref. 4.2). The areas in which freehold acquisition is sought are: part of the Teesworks Site (part of the former Redcar Steel Works Site) which is the location for the proposed Electricity Generating Station (Work No. 1) and high pressure CO₂ compression station (Work No. 7) (as well as part of Work Nos. 2A, 3A, 4, 5, 6, 8 and 10 which connect into Work Nos. 1 or 7, and part of Work No. 9A); land required for the above ground installation (AGI) (Work No. 2B), connecting the gas supply pipeline to the National Transmission System for gas and to an existing gas pipeline; and land required for the new electrical substation at Tod Point and extension works at the existing National Grid substation (Work No. 3B) (as well as part of Work No. 3A which connects into Work No. 3B, and part of Work No. 10).
- New rights (Article 25) shown edged red and shaded blue on the Land Plans. These are the areas required for installation, construction, operation and maintenance of the underground high pressure gas pipeline (Work No. 2A), the electrical connection works (Work No. 3A), water supply connection works (Work No. 4), the wastewater disposal works replacement outfall (Work No. 5B), the wastewater disposal works pipeline connections to Bran Sands (Work No. 5C), the CO₂ Gathering Network (Work No. 6), the CO₂

Export Pipeline (Work No. 8) and some of the access and highway improvements (Work No. 10). The relevant plots are set out in Schedule 7 to the Order, alongside the purpose for which the rights may be acquired. Schedule 7 includes categories of rights entirely within the subsoil beneath the River Tees where the CO₂ Gathering Network crosses the river (and where apparatus remains deep in the subsoil either side of the River Tees), and where the Water Discharge Connection Corridor and CO₂ Export Pipeline cross Coatham Dunes and Coatham Sands before continuing seaward. In some cases, new rights are also sought over plots shaded pink on the land plans, to allow for a potential alternative to acquisition of the freehold which may be possible following detailed design. The Order includes the power to impose restrictive covenants for the purposes for which new rights are sought and only so far as set out in Schedule 7.

- Extinguishment (etc) of rights (Articles 23 and 26)- the Applicants have included powers in the Order to ensure that easements, restrictions and other private rights identified as affecting the land can be extinguished or suspended, so as to facilitate the construction and operation of the Project without hindrance.
- Temporary use of land to permit construction or maintenance (Articles 31 and 32) - shown edged red and shaded yellow on the Land Plans. The Applicants can only take temporary possession of the land which is listed in Schedule 9, and additionally can take temporary possession of any other land where it has not yet exercised powers of compulsory acquisition in order to facilitate construction.
- 1.1.34 The Applicants consider that in the absence of these powers, the Order Land may not be assembled, uncertainty will continue to prevail, and its objectives and Government policy objectives would not be achieved.
- 1.1.35 The Applicants have been seeking to acquire the relevant freehold interests, new rights and temporary use of land by private treaty, in order to ensure implementation of the Project. However, it has not yet been possible to acquire all of these by agreement. Whilst seeking compulsory purchase powers, the Applicants will continue to seek to acquire the land, the temporary use of land, the rights and other interests by agreement, as well as secure the removal of matters affecting the Order Land that may impede the Project, wherever possible. This approach of making the application for powers of compulsory acquisition in the Application for the Order and, in parallel, conducting negotiations to acquire land by agreement, accords with page 6 of the CA Guidance.

- 1.1.36 Previous versions of this Statement have set out the position in relation to negotiations at Appendix 1. That appendix has been superseded by the separate Compulsory Acquisition Schedule and which is updated by the Applicants at each examination deadline. Appendix 1 has therefore been deleted from this version of this Statement.
- 1.1.37 The Applicants have sought to use alternatives to compulsory acquisition but consider that these would not achieve their objectives nor the substantial public benefits that will arise from the Project. The 'do nothing' scenario is not appropriate given the established national need for new energy generation and the urgent need to transition to a low carbon economy and meet Net Zero 2050 commitments. The Site has been selected by the Applicants for a number of technical, environmental, land and other reasons, and is highly suitable for the Project.
- 1.1.38 The Applicants also considered a number of alternative routes or corridors for the Natural Gas Connection, Electrical Connection, Water Supply Connection, Water Discharge, CO₂ Gathering Network and CO₂ Export Pipeline. The options have been narrowed and refined following the preparation of and consultation on the Preliminary Environmental Information, as well as following submission of the application to make the Proposed Development changes to the Application. None of the alternatives would provide the compelling benefits that the Project will, or would involve additional impacts or disadvantages in terms of land take, environmental, technical or other considerations.
- 1.1.39 Whilst the Applicants will continue to seek to acquire the land and rights by voluntary agreement, they require the powers of compulsory acquisition sought in order to provide certainty that they will have all the land required to construct and operate the Project, in order to realise its very significant public benefits.
- 1.1.40 Justification for the Use of the Powers of Compulsory Acquisition (Section 7)
- 1.1.41 The principal justification for the use of powers of compulsory acquisition arises from the following, that the Project:
 - meets an urgent need for new low carbon energy infrastructure;
 - is an essential part of decarbonising the power and industrial sectors, by facilitating the development of a CCUS cluster that enables decarbonisation of industrial emitters, helping the UK meet net zero targets;
 - is a form of economic development that is suitable in its local context;
 - minimises or mitigates adverse impacts to an acceptable degree; and

- is compliant with National Policy Statements ('NPS') EN-1, EN-2, EN-4 and EN-5 and in accordance with other decision-making factors specified in Section 104 of the PA 2008.
- 1.1.42 The need that exists for new electricity generating infrastructure and the deployment of Carbon Capture and Storage ('CCS') is confirmed in the Energy NPSs, designated by the Secretary of State for BEIS (then the Department of Energy and Climate Change) in July 2011. These NPSs form the primary basis for decisions by the Secretary of State on nationally significant energy infrastructure that falls to be considered under the PA 2008.
- 1.1.43 EN-1 clearly confirms the need that exists for all types of nationally significant energy infrastructure, including new fossil fuel generating stations that are carbon capture ready; and makes clear that the Secretary of State should assess applications on the basis that this need, and its scale and urgency, has been proven. Furthermore, EN-1 confirms that the Secretary of State should give substantial weight to the contribution that all developments would make toward satisfying this need.
- 1.1.44 EN-1 also recognises that even with the move to a low carbon economy, the UK will continue to rely on fossil fuels as part of its energy mix for decades to come. In this respect, fossil fuel generating stations have a vital role to play in adding to the security, diversity and resilience of the UK electricity supplies.
- 1.1.45 The Project would contribute toward the delivery of key energy and climate change policy objectives most importantly net zero by 2050.
- 1.1.46 The Applicants consider that there is a clear and compelling national need for the Project as:
 - the Project will make a major contribution toward addressing the need that exists for new electricity generating capacity in the UK and that it will add to the security, diversity and resilience of UK electricity supplies and support to transition to low carbon electricity generation;
 - the Project's onshore CO₂ Gathering Network will make a major contribution to the UK's decarbonisation of several industrial sectors; and
 - the Applicants have selected the Site on which to construct and operate the Project for technical, environmental and commercial reasons.

1.1.47 Policy Support (Section 8)

1.1.48 The Energy NPSs form the primary basis for decisions by the Secretary of State on applications for NSIPs. In addition to setting out the strong need for new

energy infrastructure, they provide detailed guidance on the matters to take into account when both preparing and assessing applications for NSIPs. They (and section 104 of the Planning Act 2008) also confirm that the Secretary of State must have regard to any other matters that they consider are both 'important and relevant', which can include the NPPF and local development plan policy. Both the NPS and NPPF are clear, however, that in the event of any conflict between a NPS and another document, the NPS prevails. There is also a considerable amount of recent UK policy and other reports relating to energy and climate change, focussed on the urgent need for decarbonisation and the role of technologies including CCS/CCUS in this respect. These documents will also be 'important and relevant' matters.

1.1.49 The Application includes a detailed assessment of the Project, taking account of the findings of the EIA as reported within the ES, against the relevant NPSs and other relevant policy documents such as the NPPF, local development plan and energy and climate change policy.

1.1.50 Special Considerations (Section 9)

- 1.1.51 There are Crown interests within the Order Limits. The Order includes an Article protecting the position of the Crown. The Applicants have been negotiating with the Crown Estate Commissioners in order to secure the rights and access necessary to carry out the relevant parts of the authorised development and to obtain the consent of the Crown to the inclusion of provisions applying in relation to Crown land.
- 1.1.52 There is Open Space Land within the Order Limits. The Applicants are not seeking to compulsorily acquire any part of the Open Space Land (i.e. to acquire the freehold interest), but have included powers to compulsorily acquire new rights over the Open Space Land, for the purposes of constructing, maintaining and operating the works set out above. With respect to the Open Space Land:
 - (a) the physical appearance of the Open Space Land will be unaffected;
 - (b) the use of the Open Space Land for recreation will carry on uninterrupted except for potential restrictions over limited areas of the Open Space Land for short periods; and
 - (c) public access to the Open Space Land will not be permanently affected.
- 1.1.53 The Applicants therefore consider that the test under section 132(3) of the PA 2008 is satisfied, and the Open Space Land will not be any less advantageous to persons in whom it is vested, other persons, if any, if entitled to rights of common or other rights, and to the public.

1.1.54 Various land or apparatus of statutory undertakers and other third parties are affected by the Project. The Applicants have included protective provisions within the Order and separately are seeking to agree these with each statutory undertaker or third-party. The current position in terms of negotiations with statutory undertakers and other third parties in relation to protective provisions is in the Compulsory Acquisition Schedule (updated and submitted at each examination deadline).

1.1.55 Other Consents and Order (Section 10)

- 1.1.56 The Applicants require various other consents, as well as a DCO, in order to build and operate the Project. These include an environmental permit, land drainage consent, hazardous substance consent (if necessary) and a greenhouse gas permit. The Applicants have included provision for deemed marine licences in the Order (at Schedules 10 and 11, Document Ref. 2.1). Other consents and licences will also be required for those parts of the wider project that will be located off-shore and are not part of the Application.
- 1.1.57 The Applicants are not aware of any reason why these and other consents required would not be granted and therefore do not consider that they represent an impediment to the Project proceeding. Further details on these are set out in Other Consents and Licences (Document Ref. 5.11).

1.1.58 Human Rights (Section 11)

- 1.1.59 The Order has the potential to infringe the human rights of persons who own property or have rights in the land proposed to be acquired pursuant to the Order.
- 1.1.60 The Applicants consider that there would be very significant public benefit arising from the making of the Order for the Project. That benefit can only be realised if the Order includes compulsory acquisition powers, and the purpose for which the land is sought (to build and operate the Project) is legitimate.
- 1.1.61 The Applicants consider that there is a compelling case in the public interest for the exercise of such powers of compulsory acquisition. The Applicants consider that it would, therefore, be appropriate and proportionate for the Secretary of State to make the Order, including the compulsory acquisition powers sought.

1.1.62 Further Information (Section 12)

1.1.63 Owners and occupiers of property affected by the Order who wish to negotiate a sale or discuss matters of compensation should contact Harry Stubbs of Dalcour Maclaren (telephone – 01270 446417 / 07833206704, email - Harry.stubbs@dalcourmaclaren.com).

1.1.64 Provision is made by statute for compensation for the compulsory acquisition of land. Helpful information is given in the series of booklets published by the Department for Communities and Local Government entitled "Compulsory Purchase and Compensation". Copies of these booklets are obtainable, free of charge, from: https://www.gov.uk/government/collections/compulsory-purchase-system-guidance.

2.0 **INTRODUCTION**

2.1.1 Overview

- 2.1.2 This Statement of Reasons (Document Ref. 3.2) has been prepared on behalf of Net Zero Teesside Power Limited and Net Zero North Sea Storage Limited (the 'Applicants'). It forms part of the application (the 'Application') for a Development Consent Order (a 'DCO'), that has been submitted to the Secretary of State for Business, Energy and Industrial Strategy ('BEIS'), under Section 37 of 'The Planning Act 2008' (the 'PA 2008').
- 2.1.3 The Applicants are seeking development consent for the construction, operation and maintenance of the Net Zero Teesside Project ('NZT'), including associated development (together the 'Project') on land at and in the vicinity of the former Redcar Steel Works site, Redcar and in Stockton-on-Tees, on Teesside (the 'Site'). The former Steel Works site, along with other land required for the Project, lies within the boundary of the land controlled by the South Tees Development Corporation ('STDC'), which is now known as 'Teesworks'.
- 2.1.4 A DCO is required for the Project as it falls within the definition and thresholds for a 'Nationally Significant Infrastructure Project' (a 'NSIP') under Sections 14(1)(a) and 15 of the PA 2008, associated development under Section 115(1)(b) and by direction under Sections 35(1) and 35ZA of the same Act. The DCO, if made by the Secretary of State, would be known as the 'Net Zero Teesside Order' (the 'Order').
- 2.1.5 The Project will be the UK's first commercial scale, full chain carbon capture, utilisation and storage ('CCUS') project and will initially capture up to 4 million tonnes (Mt) of carbon dioxide (CO₂) emissions per annum. It will comprise a number of elements, including a new gas-fired Electricity Generating Station with post-combustion carbon capture plant; gas, water and electricity connections (for the generating station); a CO₂ pipeline network (a 'gathering network') for collecting CO₂ from a cluster of local industries on Teesside; a CO₂ compressor station (for the compression of the CO₂) and a CO₂ Export Pipeline.
- 2.1.6 The CO₂ captured from the Electricity Generating Station and local industries will be compressed and then transported (via the export pipeline) for secure storage within the Endurance saline aquifer located 145 kilometres offshore from Teesside under the North Sea. The CO₂ Export Pipeline has the capacity to carry up to 10Mt of CO₂ per annum. The Project will therefore make a significant contribution toward the UK reaching its greenhouse gas emissions target by 2050.

2.1.7 The Applicants

- 2.1.8 NZT encompasses proposals to both decarbonise electricity generation and a cluster of carbon intensive industries on Teesside. In line with the CCUS business models published by BEIS in December 2020, there will be separate entities who will be responsible for:
 - Electricity generation with post-combustion carbon capture (including the gas, water and electricity connections);
 - CO₂ gathering (from industrial emitters), CO₂ compression and CO₂ export and storage; and
 - o industrial (including hydrogen production) carbon capture and connections to the CO₂ gathering network.

The entities are set out in **Table 2.1** below:

Table Error! No text of specified style in document..1: NZT Entities

Onshore works scope	Partnership	NZT Entity	Within the scope of the DCO Application?
Electricity Generating Station with post- combustion carbon capture (including the gas, water and electricity connections)	bp* and Equinor	Net Zero Teesside Power Limited	Yes
CO ₂ gathering network, CO ₂ compression and the onshore section of CO ₂ export pipeline	bp*, Equinor, National Grid, Shell and Total	Net Zero North Sea Storage Limited	Yes
Industrial and hydrogen production carbon	Individual industrial emitters	N/A	No

capture and		
connection to		
the CO ₂		
gathering		
network		

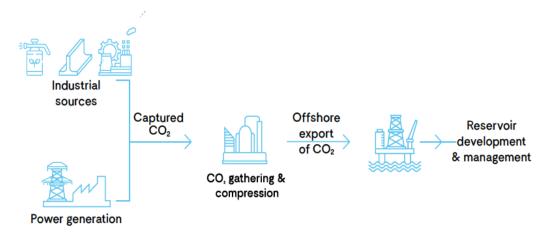
^{*}Operator on behalf of the relevant Partnership

- 2.1.9 NZT is being promoted by Net Zero Teesside Power Limited ('NZT Power') and Net Zero North Sea Storage Limited ('NZNS Storage'). NZT Power and NZNS Storage (together the Applicants for the purposes of the DCO Application) have been incorporated on behalf of bp as operator of the two Partnerships.
- 2.1.10 The electricity generation with post-combustion carbon capture Partnership comprises bp and Equinor, with bp leading as operator. NZT Power will be responsible for the Project in so far as it relates to the construction, operation and eventual decommissioning of the Electricity Generating Station together with its carbon capture plant (both within the scope of the DCO Application).
- 2.1.11 The CO₂ Gathering Network, CO₂ Compression and onshore section of CO₂ Export Pipeline Partnership comprises bp, Equinor, National Grid, Shell and Total, with bp leading as operator. NZNS Storage will be responsible for the Project in so far as it relates to the construction, operation and eventual decommissioning of the equipment required for the high-pressure compression of CO₂ from the Electricity Generating Station and industrial emitters via the CO₂ Gathering Network and the onshore section of the CO₂ Export Pipeline (these are all within the scope of the DCO Application).
- 2.1.12 NZNS Storage will also be responsible for the offshore elements of NZT, comprising the offshore section of the CO₂ export pipeline (below Mean Low Water Springs ('MLWS')) to a suitable offshore geological CO₂ storage site under the North Sea, CO₂ injection wells and associated infrastructure. The offshore elements of NZT (with the exception of the gas and CO₂ pipeline crossings of the River Tees and the water outfall from the Electricity Generating Station) do not form part of the DCO Application.

2.1.13 What is Carbon Capture, Utilisation and Storage?

2.1.14 Carbon Capture, Utilisation and Storage ('CCUS') is a process that removes CO₂ emissions at source, for example emissions from an electricity generating station or industrial installation, and then compresses the CO₂ so that it can be safely transported to secure underground storage sites. It is then injected into layer of solid rock filled with interconnected pores where the CO₂ becomes trapped and locked in place, preventing it from being released into the atmosphere. **Figure 2.1** below shows what is involved in the process.

Figure Error! No text of specified style in document..1: CCUS Process



- 2.1.15 The technologies used in CCUS are proven and have been used safely across the World for many years. Storage sites are located several kilometres underground and are subject to stringent tests to ensure that they are geologically suitable. In the UK, it is expected that the storage sites will be located offshore, in areas such as the North Sea.
- 2.1.16 CCUS is one of a number of technologies that are crucial to reducing CO₂ 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.

2.1.17 The Site

- 2.1.18 The Site lies within the administrative boundaries of both Redcar and Cleveland Borough Council ('RCBC') and Stockton-on-Tees Borough Council ('STBC'). It also partly lies within the boundary of the Teesworks area that is controlled by the STDC.
- 2.1.19 Most of the Site lies within the administrative area of RCBC, although parts of Site (for the Electricity Generating Station's gas supply connection to the National Transmission System for gas and the CO₂ Gathering Network) cross the River Tees into the administrative area of STBC. At this location, the River Tees is tidal. In addition, there are elements of the Site which extend into South Gare, Coatham Sands and the North Sea. Those sections of the Site that are below MLWS are outside the jurisdiction of either local authority being part of the UK marine area.
- 2.1.20 The Site extends to approximately 267.40 hectares ('ha') in area. Much of it comprises previously developed (including part of the former Redcar Steel Works Site) and existing industrial land, some of which was reclaimed from the Tees Estuary in the late C19th and during the C20th. The Site is relatively

flat and low-lying and sits at a level of between approximately 4 and 12 metres Above Ordnance Datum ('AOD'). The area surrounding the Site is largely characterised by industrial and commercial uses, although there are open areas of land to the north in the form of South Gare and Coatham Sands, which are used for recreational purposes and that are of nature conservation importance.

2.1.21 A more detailed description of the Site and its surroundings is provided at Chapter 3 'Description of the Existing Environment' in the Environmental Statement ('ES') Volume I (Document Ref. 6.2).

2.1.22 The Project

- 2.1.23 The Project will work by capturing CO₂ from the Electricity Generating Station in addition to a cluster of local industries on Teesside and transporting it via a CO₂ export pipeline to the Endurance saline aquifer under the North Sea. The Project will initially capture and transport up to 4Mt of CO₂ per annum, although the CO₂ Export Pipeline has the capacity to accommodate up to 10Mt of CO₂ per annum thereby allowing for future expansion.
- 2.1.24 The Project comprises the following elements:
 - a combined cycle gas turbine ('CCGT') Electricity Generating Station with an electrical output of between 750 and 860 megawatts and postcombustion carbon capture plant;
 - cooling water, gas and electricity grid connections and infrastructure for the Electricity Generating Station;
 - o a CO₂ Gathering Network (including a connection under the tidal River Tees) to collect and transport the captured CO₂ from industrial emitters to a CO₂ compressor station (the industrial emitters using the gathering network will be responsible for consenting their own carbon capture plant and connections to the gathering network);
 - a high-pressure CO₂ compressor station to receive and compress the captured CO₂ from the Electricity Generating Station and gathering network before it is transported offshore; and
 - a dense phase CO₂ Export Pipeline for the onward transport of the captured and compressed CO₂ to the Endurance saline aquifer under the North Sea.
- 2.1.25 The Electricity Generating Station, its post-combustion carbon capture plant and the CO₂ compressor station will be located on part of the STDC Teesworks area (on part of the former Redcar Steel Works Site). The CO₂ Export Pipeline will also start in this location before heading offshore. The Electricity Generating Station connections and the CO₂ Gathering Network will require

- corridors of land within both Redcar and Stockton-on-Tees, including a crossing beneath the River Tees.
- 2.1.26 All of the above elements are included in the scope of the DCO Application, with the exception of the CO₂ export pipeline, where only the onshore section of pipeline above MLWS is included. The CO₂ export pipeline below MLWS and the CO₂ storage site under the North Sea (the Endurance saline aquifer) will be the subject of separate consent applications, including under the Petroleum Act 1998 and the Energy Act 2008. These applications will be supported by an Offshore Environmental Statement.
- 2.1.27 The ancillary development required in connection with and subsidiary to the above elements of the Project is detailed in Schedule 1 of the draft DCO (Document Ref. 2.1). A more detailed description of the Project is provided at Schedule 1 'Authorised Development' of the draft DCO and Chapter 4 'The Proposed Development' in ES Volume I (Document Ref. 6.2), as has been updated by the ES Addendum pursuant to the Proposed Development changes (Document Ref. 7.8.1 and 7.8.2) and the ES Addendum pursuant to the Proposed Development further changes (Document Ref. 7.11.1 and 7.11.2). The areas within which each of the main elements of the Project are to be built are denoted by the coloured and hatched areas on the Works Plans (Document Ref. 4.4).

2.1.28 The Purpose and Structure of this Document

- 2.1.29 This statement is one of a number of documents required to support the Application submitted to the Secretary of State and should be read together with those documents.
- 2.1.30 The purpose of this document is to explain why it is necessary, proportionate and justifiable for the Applicants to seek powers of compulsory acquisition within the Application to acquire land, acquire or create rights over land, to extinguish or suspend rights over land, and to temporarily use land for the purposes of the Project, and why there is a compelling case in the public interest for the Applicants to be granted these powers.
- 2.1.31 This document has been prepared in accordance with the requirements of section 37(3)(d) of the PA 2008, Regulations 5(2)(h) and 5(2)(n) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended), and the 'Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land' (DCLG, September 2013) ("the CA Guidance").
- 2.1.32 This Statement should be read alongside the other DCO application documents that relate to the compulsory acquisition powers sought by the Applicants and the need for the Project, including:

- Draft DCO (Document Ref. 2.1);
- Explanatory Memorandum (Document Ref. 2.2);
- Book of Reference (Document Ref. 3.1);
- Funding Statement (Document Ref. 3.3);
- Land Plans (Document Ref. 4.2);
- Crown Land Plans (Document Ref. 4.3);
- Works Plans (Document Ref. 4.4);
- Planning Statement (Document Ref. 5.3);
- Project Need Statement (Document Ref. 5.2);
- Design and Access Statement (Document Ref 5.4); and
- Other Consents and Licences (Document Ref. 5.11).

3.0 **DESCRIPTION OF THE PROPOSED DEVELOPMENT**

- 3.1.1 This section provides information on the main parts of the Project. The development to which the Order applies is set out at Schedule 1 to the Order (Document Ref. 2.1), and is called the 'authorised development' in that document. The Works Plans (Document Ref. 4.4) show the areas in which the parts of the Project may be constructed.
- 3.1.2 The Project comprises the construction and operation (including maintenance) and decommissioning of a Carbon Capture Utilisation and Storage (CCUS) facility comprising a gas-fired power station with an electrical output of up to 860 MWe, together with equipment required for the capture and compression of carbon dioxide (CO₂) emissions from the Electricity Generating Station. In addition, there is a need for the provision of supporting infrastructure and connections to support the Electricity Generating Station and to facilitate the development of a wider industrial carbon capture network on Teesside, the construction of which also forms part of the Project. The Project also includes high-pressure compression of CO₂ and the onshore section of a pipeline to export the captured CO₂ for off-shore storage.
- 3.1.3 Whilst the Project is designed for the future collection and sequestration of CO₂ from third-party industrial emitters, the capture and compression at source of third-party CO₂ emissions from these locations before entering the proposed CO₂ Gathering Network does not form part of the Application. Development of these third-party carbon capture and compression facilities will be the subject of separate consent applications by the operators.
- 3.1.4 The Project includes the following elements (references to "Work No." is to the corresponding work number in Schedule 1 to the draft DCO (Document Ref. 2.1) and as shown on the Works Plans (Document Ref. 4.4)):
 - A new build low-carbon gas-fired generating station with associated carbon capture plant, low pressure CO₂ compression and associated utilities and buildings (Low-Carbon Electricity Generating Station, Work No. 1), comprising:
 - Combined Cycle Gas Turbine (CCGT) Plant;
 - Cooling Infrastructure for the CCGT;
 - Carbon capture and low pressure compression plant for the CCGT; and
 - Administration, control room and stores.
 - Natural gas pipeline to supply the Low-Carbon Electricity Generating Station (Natural Gas Connection Corridor, Work No. 2A) and above ground installation (Above Ground Installation, Work No. 2B);

- A new electrical substation at Tod Point and extension works to the existing National Grid substation (Electrical Substation Works, Work No. 3B) and electrical power export lines from the Low-Carbon Electricity Generating Station to the new electrical substation at Tod Point and the National Grid Electricity Transmission System via a connection to the existing substation at Tod Point (Electrical Connection, Work No. 3A);
- A connection corridor to public utility raw water supply infrastructure, for the provision of water for the Project (Water Supply Connection Corridor, Work No. 4);
- Water discharge using an existing or replacement outfall and associated pipework for the discharge of treated effluent and surface water to Tees Bay (including a potential pipeline connection for transportation of process water to Bran Sands Waste Water Treatment Plant and return for discharge) (Water Discharge Connection Corridor, Work No. 5);
- Gaseous phase medium pressure CO₂ Gathering Network for the purpose of connecting various industrial installations across the Tees Valley (CO₂ Gathering Network, Work No. 6);
- High pressure CO₂ compression facilities (**HP Compressor Station, Work No. 7**);
- High pressure dense phase CO₂ export pipeline (CO₂ Export Pipeline Corridor, Work No. 8);
- Temporary Construction and Laydown Areas (Laydown Areas, Work No. 9);
- Access and Highway Improvements (Access and Highways Improvements, Work No. 10); and
- In connection with Work Nos. 1 to 10 of the Project (as described above):
 - surface water drainage systems, storm water attenuation systems including storage basins, oil water separators, including works to existing drainage systems;
 - electrical, gas, potable water supply, carbon dioxide, foul water drainage and telecommunications infrastructure connections and works, and works to alter the position of services and utilities connections;
 - hardstanding and hard landscaping;
 - o soft landscaping, including embankments and planting;
 - biodiversity enhancement measures;
 - security fencing, gates, boundary treatment and other means of enclosure;

- external lighting, including lighting columns;
- gatehouses;
- closed circuit television cameras and columns and other security measures;
- site establishment and preparation works, including: site clearance (including vegetation removal, demolition of existing buildings and structures); earthworks (including soil stripping and storage and site levelling) and excavations; remediation works; the creation of temporary construction access points; the alteration of the position of services and utilities; and works for the protection of buildings and land;
- temporary construction laydown areas and contractor facilities, including: materials and plant storage and laydown areas; generators; concrete batching facilities; vehicle and cycle parking facilities; pedestrian and cycle routes and facilities; offices and staff welfare facilities; security fencing and gates; external lighting; roadways and haul routes; wheel wash facilities; and signage;
- vehicle parking and cycle storage facilities;
- o accesses, roads and pedestrian and cycle routes; and
- tunnelling, boring, piling and drilling works,
- and to the extent that it does not form part of such works, further associated development comprising such other works as may be necessary or expedient for the purposes of or in connection with the relevant part of the authorised development and which fall within the scope of the works assessed in the environmental statement.
- 3.1.5 The Low-Carbon Electricity Generating Station together with the associated carbon capture and compression facilities are referred to as the "PCC Site". Further details of the Project are set out in Section 4.3 of Chapter 4 of the ES Volume I (Document Ref. 6.2) and Figures 3-2A to E in ES Volume II (Document Ref. 6.3), as have been updated by the ES Addendum pursuant to the Proposed Development changes (Document Ref. 7.8.1 and 7.8.2) and the Second ES Addendum pursuant to the Proposed Development further changes (Document Ref. 7.11.1 and 7.11.2).

Accesses

3.1.6 During construction, HGV traffic will access/depart the PCC Site via an entrance on the A1053 Tees Dock Road and then using site roads north of Lackenby Steelworks to the PCC Site (see Figure 5-1, ES Volume II, Document Ref. 6.3). The same access will be used for construction traffic for the high pressure CO₂ compression facilities, CO₂ Export Pipeline and Water

- Connections. It is anticipated that the bulk of HGV traffic will access Tees Dock Road, via A19 and A66 or A174. However, some local HGV traffic may access the Tees Dock Road from the north-east via the A1085 Trunk Road.
- 3.1.7 Access to the CO₂ Gathering Network and Natural Gas Connection Corridor north of the Tees will be via the A1185, A1046, A178, B1725, Cowpen Bewley Road, Nelson Road and Seaton Carew Road for both construction staff and HGVs (see Figure 5-1, ES Volume II, Document Ref. 6.3).
- 3.1.8 Abnormal indivisible loads will be delivered by ship where possible, using an area of the RBT facility with the agreement of the operator Redcar Bulk Terminal Ltd and transported to the PCC Site using the internal Teesworks road network.
- 3.1.9 For smaller loads delivered by ship, the facilities at Teesport located to the south-west of the PCC Site could be used, with the agreement of the operator and PD Teesport. HGV traffic from Teesport will access the site via Tees Dock Road and the internal road network north of Lackenby Steelworks (Work No. 10).
- 3.1.10 To support the trenchless pipeline routes from the PCC Site across the dunes within the working corridor to the near shore, a temporary construction gate will be created onto South Gare Road from the Site, to allow construction personnel to transit to/from the pipeline work area from the PCC Site. This may require temporary traffic controls on the private South Gare Road to minimise risk of collisions. The temporary gate will be security access controlled.
- 3.1.11 During operation, the main PCC Site would be accessed from the A1085 Trunk Road, a dual carriageway road running north-east to south-west between Redcar and the A1053 Tees Dock Road. The road is subject to the national speed limit. Travelling south-west from the site access, the A1085 Trunk Road provides a link to the A1053 Tees Dock Road which in turn connects to the A174 to the south and the A66 to the north. The A1053 Tees Dock Road and A174 are part of National Highways' core network.
- 3.1.12 Access routes to the Natural Gas Connection Corridor and CO₂ Gathering Network Corridor north of the River Tees are proposed via the A1046, Haverton Hill Rd, and B1275. Access routes to the Natural Gas Connection Corridor and CO₂ Gathering Network Corridor south of the River Tees are proposed via Sembcorp operated Wilton routes to enable access into the Dabholm Gut areas and utilising land managed by Anglo-American.

Flexibility

- 3.1.13 The Project is a 'First of a Kind' for this type of infrastructure project.

 Consequently, at this consenting stage of the project, the design of the Project needs to incorporate a degree of flexibility in the technology used and the dimensions and configurations of buildings and structures to allow for the future selection of the preferred technology and contractor(s).
- 3.1.14 The Environmental Impact Assessment ('EIA') has therefore been undertaken adopting the principles of the 'Rochdale Envelope', where appropriate. This has involved assessing the maximum (or where relevant, minimum) parameters for the elements where flexibility needs to be retained (such as the building dimensions or operational modes for example). Where flexibility is retained, the justification for this is outlined in Chapter 4 of the ES: Proposed Development and also in Chapter 6: Need, Alternatives and Design Evolution (ES Volume I, Document Ref. 6.2). Chapter 4 of the ES sets out the maximum design parameters and the Works Plans (Document Ref. 4.4) show the limits of deviation for each component of the Project (Work Nos. 1-10). The maximum parameters assessed in the ES are secured by the provisions of the Order (Document Ref. 2.1), including via article 4 and the cross reference to the Works Plans (Document Ref. 4.4), through the design requirement (Schedule 2) and the maximum parameters set out in Schedule 15.
- 3.1.15 Following the Proposed Development changes and the further changes applications, there remains the need to retain optionality for various elements of the Project. These remaining options and the reasons for this flexibility are set out below, and explained in further detail in Chapter 4 of the ES (as updated by the ES Addendum (Document Ref. 7.8.1 and 7.8.2) and the Second ES Addendum (Document Ref. 7.11.1 and 7.11.2)), and Section 5.0 of the Design and Access Statement (Document Ref 5.4). Following the two sets of Proposed Development changes optionality is no longer retained for the Natural Gas Connection (Work No. 2), Electrical Connection (Work No. 3), or CO2 Gathering Network (Work No. 6) but the text below is retained (as edited) in the Statement for context and information.

Natural Gas Connection

Natural gas will be used as the fuel for the operation of the Low-Carbon Electricity Generating Station. Subject to agreement with National Gas Grid, natural gas will be supplied via a tie-in to the gas transmission network in the area (Work No. 2). It is proposed that this will be on the north bank of the Tees at Seal Sands with subsequent transport through the existing 24" Sembcorp gas line which runs through North Tees. The existing Sembcorp pipeline crosses the river Tees and lands on the north bank of Dabholm Gut and runs on to

Wilton site on the South Tees. At a point near the Northumbrian Water's Bran Sands wastewater treatment plant (WwTP), a new tie-in will be constructed which then connects via a new AGI into a new 16" gas pipeline which would run to the PCC Site to the new gas receiving station via a wayleave to the south of the Northumbrian Water's Bran Sands WwTP. The route corridors for connection to the high-pressure transmission system are shown in Figure 3-2B in ES Volume II (Document Ref. 6.3).

- The new gas pipeline will be installed below ground using a combination of open-cut and trenchless technologies, depending on the constraints or crossings required.
- Two new co-located AGIs will be constructed next to the existing National Gas Grid facility at Seal Sands. The first (National Gas Grid) AGI will receive the natural gas from the newly created tie-in to the existing National Gas Grid pipeline; in turn this will cross feed to the second new (NZT) AGI and then on into the Sembcorp gas line described above. The new NZT AGI will include metering, isolating valves and Pipeline Inspection Gauge ("pig") launcher.

CO₂ Gathering Network

- It is intended that the Project facilitates future third-party industrial carbon capture connections to the off-shore carbon dioxide storage site. This is to be achieved through the installation of the CO₂ Gathering Network (Work No. 6) across the surrounding area, to allow different users to connect CO₂ streams into the Network.
- The capture and compression of CO₂ from third-party industrial emitters at source does not form part of the Application but will be the subject of separate consent applications as and when investment decisions are made by third-party operators to connect into the CO₂ Gathering Network infrastructure.
- The potential routeing of the initial phase of the CO₂ Gathering Network is shown on Figure 3-2E in the Second ES Addendum Volume II (Document Ref. 7.11.2).
- The CO₂ Gathering Network will predominantly use an existing above ground pipe racking network, and using existing culverts and overbridges. The CO₂ Gathering Network is proposed to start in Billingham, pass through the Seal Sands industrial area and cross under the River Tees before entering the PCC Site for high pressure (HP) compression.

- The routeing of the CO₂ Gathering Network across the River Tees will be via an existing services tunnel (the Sembcorp No. 2 Tunnel) from Seal Sands to the northern bank of the mouth of Dabholm Gut and then above ground along the northern bank of Dabholm Gut past Bran Sands Wastewater Treatment Plant and then north to the PCC Site. (see Figure 5.2, ES Volume II, Document Ref. 6.3)
- It will also be necessary to run a fibre-optic control cable for control of the CO₂ Gathering Network from the north bank of the Tees to the PCC Site. This will cross the Tees using an existing services tunnel beneath the Tees.

Water Treatment

- A water treatment plant will be needed to treat the water feed to the plant to remove dissolved solids present and provide make-up water to the steam/water cycle, cooling water system, and for dilution of make-up solvent within the capture plant.
- In addition, wastewater treatment will be required for treatment of process effluent from the flue gas quencher and generating station prior to discharge to the environment. Two options are under consideration for the approach to wastewater treatment.
- The first option is that the process effluent will be treated on site to an appropriate standard using a WwTP and then discharged to Tees Bay via the outfall. The alternative wastewater treatment option under consideration is that the process effluent flow will be directed to Northumbrian Water's Bran Sands WwTP via a new dedicated pipeline for treatment there prior to discharge. The treated effluent may be returned by a new return pipeline to the PCC Site for discharge to Tees Bay via the outfall or discharged to the Dabholm Gut from the existing consented outfall for the Bran Sands WwTP.
- Wastewater treatment in the Bran Sands facility will be a technocommercial arrangement and may not be fully agreed until a later stage in the project development.
- Other effluent streams, including potentially contaminated surface water, process water from CO₂ compression and blow down from cooling towers and boilers, will be subject to re-use where practically possible and when not possible, on-site treatment (e.g. by chemical dosing) followed by retention prior to discharge to the outfall. The exact treatment for these streams will be determined during Front-End Engineering Design (FEED).

Water Discharge Connections

- The existing on-site outfall to the Tees Bay is proposed for the development. The outfall may require refurbishing or alternatively replacing on a new alignment adjacent to the CO₂ Export Pipeline. As replacement represents the worst-case option, both this and refurbishment are assessed in the ES.
- Should the alternative that utilises the Bran Sands WwTP be selected, then a pipeline connection for the return of treated effluent from Bran Sands WwTP to the PCC Site will be included to enable the treated effluent to be discharged to the Tees Bay via the outfall.
- Discharge of domestic/sanitary effluent would be to the local sewerage system for treatment with a tie-in on the Teesworks site being proposed. The current system is routed to Marske-by-the-Sea sewage treatment works.
- The location of the Water Supply and Discharge Connections is shown on Figure 3-2D in ES Volume II, Document Ref. 6.3.

Electrical Connection

- The existing electrical infrastructure in the Teesside area comprises 275 kilovolt (kV) and 400 kV overhead lines as well as lower voltage above and below underground cables that serve the existing National Grid Electricity Transmission (NGET) substation at Tod Point.
- The proposed Electrical Connection (Work No. 3A) for the import/export of electricity will be between the substation forming part of the Low-Carbon Electricity Generating Station (Work No. 1) and NGET's Tod Point substation 1.3 km to the south (see Figures 3-2C and 5-3 in ES Volume II, Document Ref. 6.3 and the Electrical Connection Plans (Document Ref. 4.8)).
- The Electrical Connection (Work No. 3A) will comprise a 275 kV single circuit cable route and control system cables connecting the substation on the PCC Site into a new NZT owned Electrical Substation (Work No. 3B) adjacent to the existing NGET 275kV Tod Point substation (also within Work No. 3A). The electrical connection works will also involve NGET extending its Tod Point substation by adding new bays to the existing Tod Point substation compound. This extension to the NGET substation is included in Work No. 3B.
- The corridor for the Electrical Connection is broad in parts due to the fact that the site is the subject of development proposals by Teesworks which are still being worked up and designed in detail, and

- the Electrical Connection routeing needs to be flexible to fit with the development that actually comes forward.
- All electrical and control system cables will be installed below ground or at ground level (with a crossing over the railway line) no new overhead transmission lines are proposed as part of the works. The proposed Electrical Connection corridor and proposed location of the new electrical substation are shown on the Electrical Connection Plans (Document Ref. 4.8). These plans also show the indicative layout and elevation of the new electrical substation and the extension to the existing NGET substation. NGET will be responsible for adding new bays to the existing Tod Point substation; such works would be within the existing Tod Point substation compound. The area required for the new electrical substation and the extension to the adjacent NGET Tod Point substation are both within Work No. 3B and Work No. 3A as illustrated on the Works Plans (Document Ref. 4.4) to facilitate the construction of the connection between them.
- The maximum parameters for the new electrical substation are specified in Table 4-1. Within Work No. 3B the exact location of the proposed new electrical substation is not currently known as this will be dependent on detailed design and any development proposals which come forward in the area. Therefore, the area covered by Work No. 3B is larger than required for the new electrical substation but the maximum parameters are as specified in Table 4-1 in Chapter 4 of the ES and the Design Parameters within the draft DCO.
- Within the PCC Site a generating station substation will also be constructed. The indicative location in which it will be built within Work No. 1 and its maximum parameters are illustrated on The PCC Facility Plans (Document Ref. 4.6) and in Table 4-1 of Chapter 4 of the ES. The area defined for the electrical connection within Work No. 1 is larger than required for the generating station switchyard to allow a degree of flexibility regarding its exact location but the maximum parameters are as specified in Table 4-1 and the Design Parameters within the draft DCO.
- At the time of Application submission, NZT Power Ltd. and NGET have executed the bilateral connection agreement, construction agreement and related document(s), thus confirming the planned connection date and sufficiency of capacity at the Tod Point substation to accommodate the export of electricity from the Low-Carbon Electricity Generating Station located within the PCC Site.

3.1.16 Timing of construction

- 3.1.17 Construction of the Project is detailed in Chapter 5: Construction Programme and Management of the ES (Volume I, Document Ref. 6.2). At this stage in the project development a detailed construction programme is not available as this is normally determined by the contractors who have not yet been appointed. However, an indicative construction programme is presented within Chapter 5: Construction Programme and Management (ES Volume I, Document Ref. 6.2). Should a Development Consent Order (DCO) be granted for the construction and operation of the Project (which at this stage is anticipated to be late-2022 at the earliest), then, subject to a final investment decision, construction is likely to commence in 2023 (following the commencement of site preparation and remediation works by Teesworks, the landowner). It is anticipated that operation of the Project would commence in 2026.
- 3.1.18 It is envisaged that the PCC Site will have an expected design life of around 25 years. At the end of its expected design life it is expected that these elements of the Project may have some residual life remaining and the operational life may be extended.
- 3.1.19 The CO₂ Gathering Network and CO₂ Export Pipeline have been designed to operate independently of the PCC Site and will have a design life of around 40 years.

4.0 **DESCRIPTION OF THE SITE AND ORDER LAND**

4.1.1 The Site

- 4.1.2 The Site boundary has an area of approximately 267.40 hectares (ha) and covers a wide area located within the administrative boundaries of RCBC to the south of the River Tees (South Bank and Dormanstown Wards) and in STBC to the north of the River Tees (Billingham South Ward). A portion of the Site to the south of the Tees also lies within the Teesworks area.
- 4.1.3 The Order Land (the area in which powers of compulsory acquisition are sought) covers the entire Site because the Applicants may need to compulsorily acquire the land, or new rights or occupy the land temporarily and therefore all areas of the Site are shown shaded pink, blue or yellow.
- 4.1.4 The Site is divided into the following areas (described in more detail in Chapter 4: Proposed Development (ES Volume I, Document Ref. 6.2, as updated by the ES Addendum (Document Ref. 7.8.1 and 7.8.2) and Second ES Addendum (Document Ref. 7.11.1 and 7.11.2)) and shown on Figures 3-2A to 3-2E (ES Volume II, Document Ref. 6.3)):

- The Power, Capture and Compression (PCC) Site (Figure 3-2A);
- CO₂ Export Pipeline (Figure 3-2A);
- Natural Gas Connection Corridor (Figure 3-2B);
- Electrical Connection Corridor (Figure 3-2C);
- Water Supply Connection Corridor (Figure 3-2D);
- Water Discharge Connection Corridor (Figure 3-2D);
- CO₂ Conditioning and LP Compressor Station; and
- CO₂ Gathering Network Corridor (Figure 3-2E).
- 4.1.5 The PCC Site has an area of approximately 42.5 ha (see Figure 3-1, ES Volume II, Document Ref. 6.3) and is located on the existing Teesworks site. This is land which was formerly part of the former Redcar Steelworks site, on the south bank of the River Tees, to the south-east of the Redcar Bulk Terminal, in the South Bank Ward of RCBC.
- 4.1.6 The former Redcar Steelworks site comprises approximately 225 ha of land previously used for iron and steel manufacture developed on land reclaimed from the Tees Estuary over the late 19th and 20th centuries. The PCC Site contains redundant large-scale plant and buildings associated with the steelworks including the former raw materials handling facility, the sinter plant and conveyor systems. There are also large open land areas that were previously utilised for raw materials, storage and processing.
- 4.1.7 The former Redcar Steelworks site also contains parts of the CO₂ Export Pipeline Corridor, parts of the CO₂ Gathering Network Corridor, parts of the Natural Gas Pipeline Corridor, and parts of the Water Supply and Discharge Connection Corridors. The part of the Water Discharge Connection Corridor containing the former Steelworks outfall is located between the former blast furnace and coke works.
- 4.1.8 Both the Water Discharge Connection Corridor and the CO₂ Export Pipeline cross Coatham Dunes and Coatham Sands before continuing seaward. The Water Supply Corridor follows the route of the former Northumbrian Water feed to the former Redcar Steelworks site.
- 4.1.9 The other connections corridors outside the former Redcar Steelworks site are located within and around land developed for use by the steel industry from the late 19th century and by the chemical industry after the second world war, including land at Billingham and Seal Sands. The majority of this land has also been reclaimed from the Tees Estuary in the past.

- 4.1.10 The other connections corridors pass through vacant land or existing utilities corridors to the south and north of the River Tees:
 - the Natural Gas Connection Corridor runs to the south of the PCC Site to allow connection to the existing Sembcorp natural gas pipeline at Bran Sands (as set out above) and with AGIs to connect to the National Transmission System at Seal Sands;
 - the Electrical Connection Corridor runs to the south of the PCC Site to allow connection for electricity export/import to/from the National Electricity Transmission System (NETS) at Tod Point Substation; and
 - the CO₂ Gathering Network will allow the connection of current and potential future industries at Seal Sands and Billingham via a crossing of the River Tees to the PCC Site.

4.1.11 Surrounding Area

- 4.1.12 The area surrounding the Site is characterised by industrial land uses. The nearest main settlements are the towns of Redcar, Eston and Middlesbrough. There is a concentration of industrial land uses around the mouth of the River Tees. The operational Redcar Bulk Terminal is located to the north-west of the PCC Site, on the south bank of the River Tees. Rail lines to and from the Redcar Bulk Terminal run east/west along the southern boundary of the former Redcar Steelworks site.
- 4.1.13 To the north of the Site lie the coastal areas of South Gare and Coatham Sands, that are local environmental and community assets. These are accessed from Warrenby via a private road to South Gare breakwater with permissive access (South Gare Road). To the south lies Northumbrian Water Ltd.'s Bran Sands wastewater treatment works, operational land of PD Ports Teesport beyond which is the Wilton International chemical complex.
- 4.1.14 The Teesside Wind Farm is located off-shore approximately 2.4 km north-east of the Site and is oriented north-west to south-east, parallel with the shoreline at Coatham Sands.
- 4.1.15 The Site extends north and west across the River Tees through Seal Sands and on towards Billingham. On the north bank of the River Tees industrial complexes are present at Seal Sands and Billingham with both industrial and residential development at Port Clarence.
- 4.1.16 The main route to the Site will be via existing access roads from the A1085 Trunk Road between Redcar and the A1053 Tees Dock Road, north of Grangetown and approximately 4 km south of the PCC Site. From here, the A19 will be accessed from either the A66, passing north of Middlesbrough, or the A174, passing to the south. Traffic accessing parts of the Site located to

the north of the River Tees will travel from the A19 via the A1046, A178 and A1185.

5.0 **COMPULSORY ACQUISITION POWERS**

5.1.1 **Overview**

- 5.1.2 Section 120 of the PA 2008 provides that an order granting development consent may make provision relating to, or to matters ancillary to, the development for which consent is granted. Schedule 5 to the PA 2008 lists the matters ancillary to the development, which include the acquisition of land, compulsorily or by agreement, and the creation, suspension or extinguishment of, or interference with, interests in or rights over land, compulsorily or by agreement.
- 5.1.3 Section 122 of the PA 2008 provides that an order granting development consent may include provision authorising the compulsory acquisition of land only if the Secretary of State, in respect of the Application, is satisfied that the land is:
 - required for the development to which the development consent relates,
 - required to facilitate or is incidental to that development, or
 - replacement land for commons, open spaces, etc.
- 5.1.4 The Secretary of State must also be satisfied that there is a compelling case in the public interest for the inclusion of powers of compulsory acquisition in the Order. This is required by section 122(3).
- 5.1.5 The application of these statutory conditions and tests to the DCO Application and to the Project is considered in the following sections of this document.

6.0 NEED FOR THE COMPULSORY ACQUISITION OF LAND AND RIGHTS

6.1.1 The matters to which the Secretary of State must have regard

- 6.1.2 As noted above, under Section 122 of the PA 2008, a DCO which includes compulsory acquisition powers may be granted only if the conditions in Sections 122(2) and 122(3) are met. The conditions to be met are that:
 - the land is required for the development to which the DCO relates or is required to facilitate or is incidental to the development (Section 122(2)) (see paragraph 6.1.7 onwards below); and
 - there is a compelling case in the public interest for inclusion of powers
 of compulsory acquisition in the DCO (Section 122(3)). The Secretary
 of State must be persuaded that the public benefits from the
 compulsory acquisitions will outweigh the private loss suffered by
 those whose land is to be acquired (see Sections 7 and 8 below).
- 6.1.3 In respect of the Section 122(2) condition, the 'Guidance related to procedures for the compulsory acquisition of land' (at paragraph 11 of the CA Guidance) states that applicants should be able to demonstrate to the satisfaction of the Secretary of State that the land in question is needed for the development for which consent is sought. The CA Guidance goes on to say that the Secretary of State will need to be satisfied that the land to be acquired is no more than is reasonably required for the purposes of the development.
- 6.1.4 In respect of the Section 122(3) condition, the CA Guidance (at paragraph 13) states that the Secretary of State will need to be persuaded that there is compelling evidence that the public benefits that would be derived from the compulsory acquisition will outweigh the private loss that would be suffered by those whose land is to be acquired. At paragraph 14, the CA Guidance states that in determining where the balance of public interest lies, the Secretary of State will weigh up the public benefits that a scheme will bring against any private loss to those affected by compulsory acquisition.
- 6.1.5 Further, paragraphs 8 to 10 of the CA Guidance also set out a number of general considerations that the applicant must demonstrate to the satisfaction of the Secretary of State when justifying an order authorising compulsory acquisition. These are as follows:
 - that all reasonable alternatives to compulsory acquisition (including modifications to the Project) have been explored - see section 4.0 above in relation to how the Applicants selected parts of the Site, and more generally paragraph 6.1.20 onwards;

- that the proposed interference with the rights of those with an interest in the land is for a legitimate purpose and is necessary and proportionate - see the remainder of this section, and Section 11 below;
- that the Applicants have a clear idea of how they intend to use the land which it is proposed to acquire - Sections 3 and 4 above describe the Site and the Project, and this section describes the nature of the interest sought and the purposes for which areas are to be acquired or used:
- that there is a reasonable prospect of the requisite funds for the acquisition becoming available see the Funding Statement (Document Ref. 3.3); and
- that the purposes for which compulsory acquisition of land powers are included in the DCO are legitimate and are sufficient to justify interfering with the human rights of those with an interest in the land affected - see Section 11.
- 6.1.6 This Statement sets out the factors that the Applicants considers demonstrate that the conditions in Section 122 of the PA 2008, and the considerations set out in the CA Guidance, are satisfied.
- 6.1.7 Need for Compulsory Acquisition of Land and Rights (Sections 122(2) and (3))
- 6.1.8 To ensure that the Project can be built, maintained and operated, and so that the Government's policies are met in relation to the timely provision of new low carbon generating capacity and meeting net zero carbon emissions targets for 2050, the Applicants require the acquisition of a number of property interests in third-party ownership, and have therefore applied for the grant of powers to facilitate acquisition and/or creation of new rights and interests, and to extinguish rights over land.
- 6.1.9 There are four categories of land powers included in the Order (Document Ref. 2.1) three of these are powers of compulsory acquisition of interests and the fourth is a power to occupy land temporarily. Each is introduced briefly below, followed by further information on the necessity of the powers sought and the purpose for which the Applicants require the land. The section also provides information on the status of negotiations to acquire these interests by agreement.
 - All interests (including freehold) the land over which compulsory
 powers are sought generally (and therefore including the freehold
 interest) is shown edged red and shaded pink on the Land Plans

(Document Ref. 4.2). In summary, the areas in which freehold acquisition is sought are:

- part of the Teesworks Site (part of the former Redcar Steel Works Site) which is the location for the proposed Electricity Generating Station (Work No. 1) and high pressure CO₂ compression station (Work No. 7) (as well as part of Work Nos. 2A, 3A, 4, 5, 6, 8 and 10 which connect into Work Nos. 1 or 7, and part of Work No. 9A);
- land required for the above ground installations (AGIs) (Work No. 2B), connecting the existing Sembcorp gas supply pipeline to the National Transmission System for gas and connecting the existing Sembcorp gas pipeline to the Gas Connection (Work No. 2A). The AGI locations are plots 112; and 325, 328, 329, 330 and 333 (these plots are also included within some or all of Work Nos. 2A, 2B, 6 and 10); and
- land required for the new electricity substation at Tod Point and extension works at the existing National Grid substation (Work No. 3B) (as well as part of Work No. 3A which connects into Work No. 3B, and part of Work No. 10), being plots 393b, 540b and 540c.

The Applicants have only included powers to compulsorily acquire the freehold interest in land where other powers (such as to acquire new rights or take temporary possession) would not be sufficient or appropriate to enable the construction, operation or maintenance of the Project. Article 22 of the Order is relied upon in respect of this land.

• New rights - the land over which compulsory powers are sought in respect of the creation of new rights is shown edged red and shaded blue on the Land Plans. In summary, these are the areas required for installation, construction, operation and maintenance of the underground high pressure gas pipeline (Work No. 2A), the electrical connection works (Work No. 3A), water supply connection works (Work No. 4), the wastewater disposal works – replacement outfall (Work No. 5B), the wastewater disposal works – pipeline connections to Bran Sands (Work No. 5C), the CO₂ Gathering Network (Work No. 6), the high pressure carbon dioxide export pipeline (Work No. 8) and access and highway improvements (Work No. 10, to the extent these are permanent). Most of these areas over which new rights are sought include, for example the Natural Gas Connection Corridor, Electrical Connection Corridor, Water Supply Connection Corridor, Water Discharge Connection Corridor and the CO₂ Gathering Network within

which these connections are to be constructed, and where necessary, routes along which the Applicants can gain access to the relevant connection corridors.

Article 25 of the Order is relied upon in respect of new rights. The purposes for which new rights can be sought are set out in Schedule 7 to the Order, split into categories relating to the parts of the Project (e.g. the different connection corridors). Schedule 7 includes some categories of rights entirely within the subsoil where the CO₂ Gathering Network crosses the River Tees (and where apparatus remains deep in the subsoil either side of the River Tees), and where the Water Discharge Connection Corridor and CO₂ Export Pipeline cross Coatham Dunes and Coatham Sands before continuing seaward. The interaction between the taking of temporary possession and acquiring new rights is set out further below.

Article 25 of the Order is also relied upon in respect of new rights over plots shown edged red and shaded pink on the Land Plans. Article 25(4) of the Order is drafted to allow powers to acquire the freehold (under Article 22) and, in the alternative, powers to acquire new rights (and impose restrictive covenants) over plots shown shaded pink, so that if parts of these plots are not required in connection with Work Nos. 1 and 7 (as identified above), but are still required for other connections, rights can be sought over those parts of the plots, rather than acquiring the freehold. Schedule 7 to the Order distinguishes between the plots shaded blue and those shaded pink. This approach to Article 25 may allow the Applicants to acquire less land outright (pursuant to Article 22, if detailed design demonstrates that is feasible) and instead to acquire rights and impose restrictions over that and, which is a lesser interference.

In addition, the Order includes the power to impose restrictive covenants for the purposes for which new rights are sought, being to ensure protection of infrastructure installed as part of the Project (including underground elements and the CO₂ Gathering Network) and to protect and maintain accesses. The restrictions which can be acquired are limited to those for the purposes set out in Schedule 7, in each case linked to specific work numbers. The Order also includes the power to acquire rights and impose restrictions for the benefit of statutory undertakers pursuant to Article 25(5).

• Extinguishment (etc) of rights - in addition, the Applicants have included powers in the Order to ensure that easements, restrictions and other private rights identified as affecting the land can be extinguished or suspended, so as to facilitate the construction and

- operation of the Project without hindrance. In addition, there may be unknown rights, restrictions, easements or servitudes affecting that land which also need to be extinguished in order to facilitate the construction and operation of the Project. Articles 23 and 26 of the Order provide this power, which applies in relation to land in which compulsory acquisition or temporary possession are proposed.
- **Temporary use** the land in respect of which powers of temporary occupation are sought is shown edged red and shaded yellow on the Land Plans. Articles 31 and 32 of the Order are relied upon in respect of this land. Article 31 permits temporary use in two ways:
 - Firstly, the land identified in Schedule 9 to the Order may only be temporarily possessed (i.e. the Applicants cannot acquire the land nor new rights over it), and possession can only be taken for the purposes set out in that Schedule for the particular plot. In summary, these are the areas required for construction of the waste water disposal works existing outfall (Work No. 5A), temporary use as construction and laydown areas (Work Nos. 9A, 9B, 9C, 9D, 9E, and 9F) and some of the areas required for access and highway improvements (Work No. 10); and
 - Secondly, Article 31 permits the Applicants to take temporary possession of any other part of the Order Land where they have not yet exercised powers of compulsory acquisition - this will allow them (for instance) to initially take temporary possession of the whole width of corridors required for connections. This could be relevant to the Natural Gas Connection Corridor (Work No. 2A), the Electrical Connection Corridor (Work No. 3A), Water Supply Connection Corridor (Work No. 4), the wastewater disposal works - replacement outfall (Work No. 5B), the wastewater disposal works - pipeline connections to Bran Sands (Work No. 5C), the CO₂ Gathering Network (Work No. 6) and the CO₂ Export Pipeline Corridor (Work No. 8). For each of these the Order includes power to acquire new rights in order to construct, maintain and operate the relevant apparatus. Once the Applicants have carried out detailed surveys and installed the relevant apparatus (such as pipes or cable), the Applicants can then acquire new rights (pursuant to the powers set out above) within only a narrower strip in which permanent rights are required, within the wider construction corridor. This phased approach to occupation and acquisition allows the permanent rights corridor to be defined after construction, and to be only that which is necessary for the operation, maintenance and protection of the apparatus. Such an approach has precedent amongst other DCOs including the

Eggborough Gas Fired Generating Station Order 2018 and the Drax Power (Generating Stations) Order 2019.

The Applicants have included specific powers to use land temporarily to construct the Project (i.e. that coloured yellow on the Land Plans) where they do not require any interest in the land on a permanent basis. These areas relate to the temporary construction laydown areas (Work No. 9, to the extent these do not overlap with permanent works), and some access and highway improvements (Work No. 10) and which will be used for the purposes of construction. The construction working width allowed for is generally around 35 metres for the gas and electrical connections, except where this needs to be wider in order to accommodate crossings (of watercourses, drains, roads or similar), for construction compounds, and for access points, or where the corridor has been sized to 'match' the extent of an existing apparatus corridor in which the Applicants' apparatus will be built. The construction area allowed for a particular crossing depends on the likely construction method to be employed - for instance, a larger area is allowed around the start and end points for crossings to be achieved using trenchless techniques, and along the length of connections to be installed using trenchless techniques, to allow the necessary flexibility in routeing the relevant apparatus underground. Further information on the method of construction can be found in Chapter 5 of the Environmental Statement (Volume I, Document Ref. 6.2).

- 6.1.10 In all cases the plots of land shown on the Land Plans are described in the Book of Reference (Document Ref. 3.1).
- 6.1.11 The Applicants have been seeking to acquire the relevant freehold interests, new rights and temporary use of land by private treaty, in order to ensure implementation of the Project. However, it has not yet been possible to acquire all of these by agreement. In addition, the Applicants require certain matters to be suspended, overridden or extinguished within the Order Land so as to ensure there are no impediments to the construction, operation and maintenance of the Project.
- 6.1.12 In the absence of powers of compulsory acquisition, the Order Land may not be assembled, uncertainty will continue to prevail and the Applicants consider that their objectives and Government policy objectives would not be achieved.
- 6.1.13 Whilst seeking compulsory purchase powers, the Applicants will continue to seek to acquire the land, the temporary use of land, the rights and other interests by agreement, as well as secure the removal of matters affecting the Order Land that may impede the Project, wherever possible. This approach of making the application for powers of compulsory acquisition in the

- Application for the DCO and, in parallel, conducting negotiations to acquire land by agreement, accords with paragraph 26 of the CA Guidance.
- 6.1.14 The Applicants' justification for seeking compulsory purchase powers, in accordance with the provisions of the PA 2008, is to secure land, the temporary use of land, the rights and other interests required to enable them to construct, operate and maintain the Project within a reasonable commercial timeframe.
- 6.1.15 The inclusion of powers of compulsory acquisition in the Order is sought in order to ensure that this can be achieved. The relevant powers, and the land and interests sought together with the land required for temporary use, are no more than is required to facilitate the Project, its construction and future maintenance.

6.1.16 Use of the Order Land and Status of Negotiations

- 6.1.17 The purpose for which land is subject to the proposed powers of compulsory acquisition and to possess land temporarily (as per Articles 22, 23, 25, 26, 31 and 32 of the Order) was previously summarised in Appendix 1, appended to earlier versions of this Statement, however, that Appendix has been superseded by the separate Compulsory Acquisition Schedule submitted at each examination deadline.
- 6.1.18 The Compulsory Acquisition Schedule describes the purpose for which compulsory acquisition powers or temporary possession is sought by reference to the Work Nos. set out in Schedule 1 to the Order and shown on the Works Plans (Document Ref. 4.4), and by plot number as referenced in the Book of Reference and Land Plans (Document Refs. 3.1 and 4.2 respectively), with plots grouped together for each interested party. The Compulsory Acquisition Schedule should be read together with those documents. Some plot numbers appear in more than one row in the Compulsory Acquisition Schedule, indicating that there is more than one interest in the relevant plot (such as a freehold owner and a tenant).
- 6.1.19 The Compulsory Acquisition Schedule also sets out the position in terms of the Applicants' negotiations to acquire interests in land or to take possession of land required for the Project by agreement. The position in relation to statutory undertakers' apparatus within the Order Limits is also set out in the Compulsory Acquisition Schedule (and is covered more generally in section 8 below).

6.1.20 Alternatives to Compulsory Acquisition

6.1.21 The Project requires the acquisition of land and the acquisition of / creation of rights to secure the land and rights needed to build and operate the Project.

- Accordingly, there is no alternative but to seek to acquire land, the temporary use of land and the acquisition of / creation of rights to allow the Project to be constructed, operated and maintained.
- 6.1.22 It is considered that the 'Do Nothing' scenario is not appropriate given the established national need for new energy generation and the urgent need to transition to a low carbon economy and meet Net Zero 2050 commitments (see further below). The other key disadvantage of the 'Do Nothing' scenario would be the lack of additional investment in the local economy.
- 6.1.23 The main part of the Site, the Teesworks site (being the location of the Electricity Generating Station (Work No. 1) and High Pressure CO₂
 Compression Station (Work No. 7)) has been selected by the Applicants, as opposed to other potentially available sites for the following reasons, and in relation to which the Applicants took account of relevant policy in National Policy Statement EN-1, EN-2, EN-4 and EN-5 (see further in section 8 below):
 - The site was identified as being brownfield;
 - The site's location is relatively distant from residential areas;
 - The site provides sufficient area to enable construction;
 - The site's proximity to the necessary connections;
 - The site's proximity to the North Sea coastline for off-shore export of CO₂;
 and
 - The site's location in terms of accessibility for construction including from port and jetty facilities.
- 6.1.24 Further work was then done to refine the location within the Teesworks site for the PCC Site, given that the wider Teesworks site encompasses an area of over 2,000 hectares. Four main locations within the Teesworks site were considered, taking into account the strategic masterplan for the site redevelopment at that time, proximity to the North Sea, proximity to residential receptors, access, ground conditions, presence of existing structures and minimising land take adjacent to the river which was considered to be of higher redevelopment potential. A plot of land to the east of the former blast furnace was identified as the most suitable for the following reasons:
 - Proximity to the shoreline, thereby minimising the onshore high pressure
 CO₂ export pipeline length;
 - Sufficient space available for the plant and also construction laydown;
 - Distance from residential areas / population;

- Few major structures requiring demolition and removal on the main site footprint;
- Access to water supply (either Tees Estuary or public raw water supplies at the time of site selection);
- Access to an existing effluent outfall and the existing Bran Sands wastewater treatment plant;
- Proximity to construction access including jetties that could be used for delivery of abnormal indivisible loads;
- Away from areas being allocated to other potential developments and river frontage;
- Flat area when compared to other areas of the plot (e.g Long Acres); and
- Away from the dusty port operations.
- 6.1.25 At the time the Preliminary Environmental Information Report ('PEIR') was prepared a number of options remained under consideration for the routeing of some of the connections required for the Project. These connections have been progressively refined (see ES Figure 3-2A-E, ES Volume II, Document Ref. 6.3) and a summary of the alternatives considered which has resulted in those now submitted with the draft DCO is presented in Table 6-1 of Chapter 6 of the ES (Volume I, Document Ref. 6.2).
- 6.1.26 Where possible, the Project has sought to utilise existing pipeline corridors and connections for example for the routeing of the CO₂ connection corridors, for the gas supply to the power station, and choice of substation to connect into the UK transmission system, so as to reduce the need for construction works. Reuse of existing pipelines and outfall are also under consideration, subject to asset integrity testing. These options have been evaluated in terms of their environmental effects as well as taking into account constructability and landownership issues.

Natural Gas Connection

- 6.1.27 The Natural Gas Connection Corridor routeing (see Figure 3-2B, ES Volume III, Document Ref. 6.4), has been refined from that presented in the PEIR (PEIR Figure 3-2B) by:
 - identification of the connection points at Seal Sands (connecting to National Gas Grid) and one at Bran Sands (connecting to the Sembcorp gas pipeline);
 - confirmation of the open-cut pipeline routing from the Sembcorp connection at Bran Sands to the gas reception area at the PCC Site; and

 narrowing of corridors based on a review of constructability, environmental constraints and land ownership boundaries.

Electrical Connection

- 6.1.28 The Electrical Connection Corridor routeing (see Figure 3-2C, ES Volume III, Document Ref. 6.4), has been refined from that presented in the PEIR (PEIR Figure 3-2C) by:
 - the choice of the connection being to Tod Point substation only (not the longer connection to Lackenby) and that the connection to it will be underground except for the crossing of a site road and railway line using either existing or proposed third-party infrastructure;
 - the use of a 275 kV connection ruling out the need for upgrades of Tod Point substation or the wider transmission system in the area;
 - narrowing of connection corridors based on a review of constructability, environmental constraints and land ownership boundaries; and
 - the confirmation of the routeing of the cables across part of the Teesworks site and across the Tees Valley railway line.

Water Supply Connection

6.1.29 The Water Supply Connection Corridor routeing (see Figure 3-2D, ES Volume III, Document Ref. 6.4), has been refined from that presented in the PEIR (PEIR Figure 3-2D) by reaching an understanding with Northumbrian Water Ltd with respect to the supply of raw water to the PCC Site using the former steelworks supply infrastructure. This removed the potential requirement for use of the former steelworks abstraction from the River Tees and its associated pipeline corridor. The corridors have also been narrowed based on a review of constructability and environmental constraints.

Water Discharge Connection

- 6.1.30 The Water Discharge Connection Corridor routeing (see Figure 3.2D, ES Volume III, Document Ref. 6.4), has been refined from that presented in the PEIR (PEIR Figure 3.2D) by:
 - moving the location of the replacement outfall (if required) from parallel
 to the existing outfall to parallel to the CO₂ Export Pipeline, so as to reduce
 the crossings required of the internationally designated Teesside and
 Cleveland Coast SSSI/SPA/Ramsar site; and
 - adopting trenchless construction for the replacement outfall using a micro-bored tunnel to minimise the potential for impacts on Coatham

Dunes and Sands and on the habitats and species at the Teesside and Cleveland Coast SSSI/SPA/Ramsar site.

CO₂ Gathering Network

- 6.1.31 The CO₂ Gathering Network routeing (see Figure 3-2E, ES Volume III, Document Ref. 6.4), has been refined from that presented in the PEIR (PEIR Figure 3-2E) by:
 - confirmation that the pipeline will use existing pipe racking, overbridges and culverts on the north bank of the Tees;
 - confirmation of the crossing of the Tees by using the existing Sembcorp Tunnel No. 2; and
 - narrowing of connection corridors based on a review of constructability, environmental constraints and land ownership boundaries.

CO₂ Export Pipeline

- 6.1.32 The CO_2 Export Pipeline Corridor routeing (see Figure 3-2A, ES Volume III, Document Ref. 6.4), has been refined from that presented in the PEIR (PEIR Figure 3-2A) by:
 - adjusting the geometry of the CO₂ Export Pipeline Corridor to allow a more north-easterly trajectory to increase the distance between the pipeline and the off-shore Teesside Windfarm; and
 - adopting trenchless construction using a number of HDDs to minimise the potential for impacts on Coatham Dunes and Sands and on the habitats and species at the Teesside and Cleveland Coast SSSI/SPA/Ramsar site.

6.1.33 Conclusion on Alternatives

- 6.1.34 The Applicants have undertaken a clear process to identify an appropriate site (with respect to the PCC Site), and an appropriate form and route for the relevant elements of the Project (with respect to the various connections corridors and CO₂ Gathering Network), and have considered alternatives in doing so. None of the alternatives would provide the compelling benefits that the Project will, or would involve additional impacts or disadvantages in terms of land take, environmental, technical or other considerations.
- 6.1.35 The Applicants are seeking to acquire the necessary land and rights by agreement but have not been able to do so. Whilst they will continue to seek to acquire the land and rights by voluntary agreement, they require the powers of compulsory acquisition sought in order to provide certainty that they will have all the land required to construct and operate the Project, in order to realise its very significant public benefits.

6.1.36 Availability of Funds for Compensation

- 6.1.37 The Funding Statement (Document Ref. 3.3) confirms that the Applicants have the ability to procure the financial resources required for the Project, including the cost of acquiring any land and rights and the payment of compensation, as applicable. The Applicants have included an article in the draft DCO (article 48, Document Ref. 2.1) which requires them to put in place financial security before exercising any powers of compulsory acquisition.
- 6.1.38 The Applicants are not aware of any interests within the Order land in respect of which a person may be able to make a blight claim, but in the event this did occur the Applicants have sufficient funds to meet any compensation due.
- 6.1.39 The Applicants therefore consider that the Secretary of State can be satisfied that the requisite funds for payment of compensation will be available at the appropriate time.

7.0 JUSTIFICATION FOR THE USE OF THE POWERS OF COMPULSORY ACQUISITION

7.1.1 The Compelling Case

- 7.1.2 A Planning Statement (Document Ref. 5.3) and a Project Need Statement (Document Ref. 5.2) accompany the Application. These explain how the Project:
 - meets an urgent need for new low carbon energy infrastructure;
 - is an essential part of decarbonising the power and industrial sectors, by facilitating the development of a CCUS cluster that enables decarbonisation of industrial emitters, helping the UK meet net zero targets;
 - is a form of economic development that is suitable in its local context;
 - minimises or mitigates adverse impacts to an acceptable degree;
 - is compliant with National Policy Statements ('NPS') EN-1, EN-2, EN-4 and EN-5 and in accordance with other decision-making factors specified in Section 104 of the PA 2008.
- 7.1.3 The Planning Statement and Project Need Statement provide an extensive review of these matters which are summarised in the following section.

7.1.4 The Need for the Project

7.1.5 The need that exists for new electricity generating infrastructure and the deployment of Carbon Capture and Storage ('CCS') is confirmed in the Energy

NPSs, designated by the Secretary of State for BEIS (then the Department of Energy and Climate Change) in July 2011. These NPSs form the primary basis for decisions by the Secretary of State on nationally significant energy infrastructure that falls to be considered under the PA 2008.

- 7.1.6 The NPSs of most direct relevance to the Project include EN-1, EN-2, EN-4 and EN-5. Of these, EN-1 sets out the 'need' that exists for new energy infrastructure.
- 7.1.7 Part 2 of EN-1 'Government policy on energy and energy infrastructure development' outlines the policy context for the development of nationally significant energy infrastructure. It confirms the following (Section 2.2):
 - the Government's commitment to meet its legally binding target to cut greenhouse gas emissions by at least 80% by 20501 compared to 1990 levels;
 - the need to affect a transition to a low carbon economy so as to reduce greenhouse gas emissions; and
 - the importance of maintaining secure and reliable energy supplies as older fossil fuel generating plants close as a result of the European Union Emissions Trading System ('EU ETS') and the UK moves toward a low carbon economy.
- 7.1.8 Paragraph 2.1.2 highlights that energy is vital to economic prosperity and social well-being and, as such, it is important to ensure that the UK has secure and affordable energy. Furthermore, producing the energy the UK requires and getting it to where it is needed necessitates a significant amount of infrastructure, both large and small scale.
- 7.1.9 Paragraphs 2.2.20 2.2.26 of EN-1 deal with the 'security of energy supplies'. Paragraph 2.2.20 states that it is critical that the UK continues to have secure and reliable supplies of electricity as it makes the transition to a low carbon economy. Furthermore, that to manage the risks to achieving security of supply the UK needs:
 - Sufficient electricity capacity to meet demand at all times, including a 'safety margin of spare capacity' to accommodate unforeseen fluctuations in supply and demand.

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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 Government's commitment to achieve 'net zero' in terms of greenhouse gas emissions by 2050. The order amends the previous target (within the Climate Change Act 2008) which was seeking achievement of a reduction in greenhouse gas emissions of 80% by 2050 compared to 1990 levels.

- Reliable associated supply chains (for example, fuel for power stations) to meet demand as it rises.
- A diverse mix of technologies and fuels (and fuel supply routes), so that it does not rely on any one technology or fuel.
- 7.1.10 Part 3 of EN-1 'The need for new nationally significant energy infrastructure projects' 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 it is for industry to propose the type of energy infrastructure and that the Government does not consider it appropriate for planning policy to set targets for or limits on different technologies.
- 7.1.11 Notably, paragraph 3.1.3 stresses that the Secretary of State should assess applications for development consent for the types of infrastructure covered by the energy NPSs "...on the basis that the Government has demonstrated that there is a need for those types of infrastructure..." (with the scale and urgency of that need being described in the relevant part of EN-1). Paragraph 3.1.4 confirms that the Secretary of State 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.
- 7.1.12 Further to paragraph 3.1.3, Section 3.3 of Part 3 of EN-1 sets out a number of key reasons why the Government believes that there is an urgent need for new electricity infrastructure, including:
 - Meeting energy security and carbon reduction objectives the need to ensure there is sufficient electricity generating capacity to meet maximum peak demand, with a safety margin of spare capacity to accommodate unexpectedly high demand and to mitigate risks such as unexpected plant closures and extreme weather events; and a diverse mix of power generation to reduce reliance on any one type of generation or source of fuel or power (EN-1 notes that fossil fuel generation can be brought on line quickly when demand is high and shut down when it is low, thus complementing generation from nuclear and intermittent generation from renewables).
 - The need to replace closing electricity generating capacity EN-1
 identifies that at least 22 GW of existing electricity generating capacity will
 need to be replaced by 2020, as a result of tightening environmental
 regulation and aging power stations closing; in addition to this about 10
 GW of nuclear generating capacity is expected to close over the next 20

- years (by 2030). In response to this, EN-1 identifies a minimum need for 59 GW of new generating capacity over the period to 2025 (paragraph 3.3.23).
- The need for more electricity capacity to support the increased supply from renewables decarbonisation of electricity generation is reliant on a dramatic increase in the amount of renewable energy, however, some renewable sources (such as wind, solar and tidal) are intermittent and cannot be adjusted to meet demand. As a result, the more renewable generating capacity the UK has, the more generation capacity it will require overall to provide back up at times when the availability of renewable sources is low; as such EN-1 (paragraph 3.3.11) recognises that there will still be a role for fossil fuel generation, notably gas-fired generation, to provide a cost-effective means of 'back up' at short notice.
- Future increases in electricity demand even with major improvements in overall energy efficiency, it is expected that demand for electricity will increase, as significant sectors of energy demand (such as industry, heating and transport) switch from being powered by fossil fuels to using electricity. As a result of this, total electricity consumption could double by 2050 and, 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.
- 7.1.13 Following on from paragraph 3.1.3, paragraphs 3.3.15 3.3.24 of EN-1 deal with the urgency of the need for new electricity generating capacity.

 Paragraph 3.3.15 states that in order to secure energy supplies that enable the UK to meet its climate change obligations to 2050, there is an urgent need for new energy infrastructure to be brought forward as soon as possible.
- 7.1.14 Box 2.1 of EN-1 (after paragraph 2.2.24) highlights the continuing role of natural gas in safeguarding the security of the UK's electricity supplies as we move to a low carbon economy. It notes that gas will continue to play an important role thanks to its diverse sources of supply and relatively low greenhouse gas emissions compared to other fossil fuels. For example, it produces around half as much carbon dioxide per unit of electricity generated compared to coal and with the planned closure of coal-fired power stations in the UK by 2025, the gas-fired power stations are expected to plug some of the gap in electricity generation, security and flexibility. EN-1 suggests the share of natural gas as part of UK primary energy demand will fall from 41% in 2010 to around 33% by 2020 but is then likely to rise again, potentially to around 36% by 2025, as coal-fired power stations close (paragraph 3.8.1). It goes on to state that new fossil fuel power stations must be constructed and operate in line with increasingly demanding climate change goals.

- 7.1.15 Paragraphs 3.6.4 3.6.7 of EN-1 relate specifically to CCS. They explain the role CCS can have in meeting emissions targets while also maintaining security of supply (allowing gas-fired power stations to provide flexible low carbon electricity generation) and that CCS has the potential to reduce carbon emissions by up to 90%. Paragraph 3.6.4 notes that while there is a high level of confidence that the technology involved in CCS will be effective, as the complete chain of CCS has yet to be demonstrated at commercial scale on a power station, there is a lack of knowledge about the future deployment of CCS in the economy. Paragraph 3.6.6 states that in order to support the delivery of CCS policy, the Government will require all new fossil fuel generating stations at or above 300 MW to be Carbon Capture Ready ('CCR').
- 7.1.16 Paragraph 3.6.8 of EN-1 further underlines the need for new fossil fuel generation with CCS:
 - "It is important that such fossil fuel generating capacity should become low carbon, through development of CCS, in line with carbon reduction targets.

 <u>Therefore there is a need for CCR fossil fuel generating stations</u> and the need for the CCS demonstration projects is urgent." [underlining added]
- 7.1.17 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 many 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 Energy White Paper ('EWP'), December 2020.
- 7.1.18 Clearly one of the main objectives, and a key benefit of the Project, is to demonstrate flexible, dispatchable gas-fired generation with CCS at a commercial scale in the UK. Furthermore, it meets the requirement for new fossil fuel generating station at or above 300 MW to be CCR, being part of a full chain CCUS project, with CO₂ emissions being captured from day one of the commercial operation of the Electricity Generating Station. The Project 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.
- 7.1.19 On 27 June 2019, following advice from the Climate Change Committee ('CCC'), the UK Government announced a new carbon reduction 'Net Zero' target for 2050. This was given effect by an amendment to the Climate Change Act 2008 (the target for the net UK carbon emissions for 2050 changed from 80% to 100% below the 1990 baseline). In response to the Net Zero target, the Government's Energy White Paper ('EWP'), published in

December 2020, confirmed that the Secretary of State for BEIS has decided that it is appropriate to review the suite of NPSs for energy infrastructure, to ensure that they reflect the policies set out in the EWP, and that the Government continues to have a planning policy framework that can deliver the investment required to build the infrastructure needed for the transition to Net Zero by 2050. The EWP confirms that the Government aims to designate updated NPSs by the end of 2021.

- 7.1.20 While the review of energy NPSs is undertaken, the current suite of NPSs remains relevant Government policy and has effect for the purposes of the PA 2008. They therefore continue to provide a proper basis on which PINS can examine, and the Secretary of State can make decisions on, applications for energy NSIPs.
- 7.1.21 As noted above, section 104 of the PA 2008 sets out the matters that the Secretary of State must have regard to in determining applications for NSIPs, including NPSs, which can include any other matters which the Secretary of State thinks are "important and relevant" to their decision. In the case of the Project, the Applicants consider that other matters that are important and relevant to the Secretary of State's decision include recent UK Government energy and climate change policy, notably the Clean Growth Strategy; the UK CCUS Deployment Pathway; the Ten Point Plan; and the EWP, amongst others. These documents set out important Government objectives for decarbonising the power and industrial sectors (as part of achieving Net Zero by 2050) and are summarised in the following section and considered in further detail in Section 5 of the Planning Statement (Document Ref, 5.3).
- 7.1.22 The UK energy and climate change policy has established clear objectives for decarbonising the power and industrial sectors and achieving the Government's legally binding commitment to achieve 'net zero' in terms of greenhouse gas emissions by 2050. It is evident from the Applicants' review of energy and climate change policy that the Government sees CCS/CCUS as playing a key role in delivering the commitment of net zero by 2050. In particular:
 - The Government confirms that new gas-fired generating capacity with CCS/CCUS will be required to provide vital backup for less flexible renewable generation to ensure the security of UK electricity supplies and that the system can meet peak electricity demand. The Government has also committed to supporting the delivery of "at least one power CCUS plant" by 2030.
 - The deployment of CCS/CCUS technology is seen as fundamental to the decarbonisation of the UK's energy intensive heavy industries such as steel, cement, oil refining and chemicals and securing the long-term future

- of these industries within the wider economy. Teesside alone generates $3.9Mt\ CO_2$ emissions per annum.
- The Government has committed to invest £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, to support its ambition to capture 10Mt CO₂ emissions per year by the end of the decade. Teesside, with its concentration of heavy industries, including chemicals production, and access to North Sea storage, is identified as one of the key potential locations for a decarbonised industrial cluster.
- There is Government support for the large-scale manufacture of hydrogen for use in the power sector and domestic heating, including a £240 million fund. Gas reforming (the use of natural gas to manufacture hydrogen) is likely to be the cheapest source of hydrogen, at least initially, compared to electrolysis. Pairing gas reforming with CCS/CCUS is critical to delivering low carbon hydrogen manufacture.

7.1.23 **Summary**

- 7.1.24 EN-1 clearly confirms the need that exists for all types of nationally significant energy infrastructure, including new fossil fuel generating stations that are carbon capture ready ('CCR'); and makes clear that the Secretary of State should assess applications on the basis that this need, and its scale and urgency, has been proven. Furthermore, EN-1 confirms that the Secretary of State should give substantial weight to the contribution that all developments would make toward satisfying this need. As such, the need that exists for new electricity generating infrastructure, such as that proposed, is not open to debate or interpretation.
- 7.1.25 EN-1 also recognises that even with the move to a low carbon economy, the UK will continue to rely on fossil fuels as part of its energy mix for decades to come. In this respect, fossil fuel generating stations have a vital role to play in adding to the security, diversity and resilience of the UK electricity supplies. Not least, they ensure that the country is not overly reliant on any one type of generation and can be operated flexibly, providing back-up for when generation from intermittent renewable generating capacity is low, supporting the UK's transition to low carbon electricity generation.
- 7.1.26 The Project would contribute toward the delivery of key energy and climate change policy objectives most importantly net zero by 2050. It includes a high-efficiency gas-fired Electricity Generating Station with CCS at a commercial scale, while the CO₂ Gathering Network and other CO₂ infrastructure would underpin the establishment of a decarbonised industrial cluster on Teesside by the mid-2020s. This would not only facilitate the decarbonisation of existing heavy industries in the area, capturing 4Mt CO₂

per annum with the scope to increase this to 10Mt CO₂ per annum in the future, but also provide the infrastructure to support the potential for the future large-scale manufacture of low carbon hydrogen, acting as a driver for growth and jobs within the local and regional economy.

- 7.1.27 For the above reasons the Applicants consider that there is a clear and compelling national need for the Project as:
 - the Project will make a major contribution toward addressing the need that exists for new electricity generating capacity in the UK and that it will add to the security, diversity and resilience of UK electricity supplies and support to transition to low carbon electricity generation;
 - the Project's onshore CO₂ gathering network will make a major contribution to the UK's decarbonisation of several industrial sectors; and
 - the Applicants have selected the Site on which to construct and operate the Project for technical, environmental and commercial reasons.

8.0 **POLICY SUPPORT**

8.1.1 National Policy Statements

- 8.1.2 The PA 2008 grants the Secretary of State power to designate statements as National Policy Statements ('NPSs') setting out policy relevant to the examination and determination of different types of NSIPs. Notably, where a NPS has effect in relation to a type of NSIP development (such as energy generation), section 104 of the PA 2008 requires the Secretary of State to determine applications for NSIPs in accordance with the relevant NPSs, 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 Secretary of State;
 - be unlawful;
 - the adverse impacts of the development outweigh its benefits; or
 - be contrary to any regulations that may be made prescribing other relevant conditions.
- 8.1.3 Section 105 of the PA 2008 relates to decision on applications where no NPS has effect, that is, where there is no NPS in place relating to the specific type of development. In such cases, Section 105 states that in deciding the application the Secretary of State must have regard to any relevant 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 Secretary of State thinks are both important and relevant to their decision. The Applicants consider that the Project in its entirety should be determined under Section 104 of the PA 2008, as explained in Section 4.2 of the Planning Statement (Document Ref. 5.3).
- 8.1.4 Section 7 above summarises NPS EN-1's assessment of the urgent need for new energy infrastructure, such as the Project.
- 8.1.5 Part 4 of EN-1 sets out a number of 'assessment principles' that must be taken into account by applicants, PINS and the Secretary of State in (respectively) preparing, examining and determining applications for nationally significant energy infrastructure. General points include (paragraph 4.1.2), given the level and urgency of need for the infrastructure covered by the energy NPSs, the requirement for the Secretary of State to start with a presumption in favour of granting consent for applications for energy NSIPs. 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 PA 2008 (noted above) apply.
- 8.1.6 Paragraph 4.1.3 goes on to state that in considering any application, and in particular, when weighing its adverse impacts against its benefits, the Secretary of State 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.
- 8.1.7 Paragraph 4.1.4 continues by stating that within this context the Secretary of State should take into account environmental, social and economic benefits and adverse impacts, at national, regional and local levels.
- 8.1.8 Other assessment principles include the matters considered in the environmental statement; the Conservation of Habitats and Species Regulations 2010; the consideration of alternatives; criteria for 'good design'; consideration of the feasibility of combined heat and power; consideration of the requirements of the carbon capture readiness regulation; grid connection; climate change adaptation; pollution control and environmental regulatory regimes; safety; hazardous substances; health; common law and statutory nuisance and security, amongst others.
- 8.1.9 Part 5 of EN-1 lists a number of 'generic impacts' that relate to most types of energy infrastructure, which both applicants and the Secretary of State should take into account when preparing and considering applications. These include land use; socio-economics; air quality and emissions; noise and vibration; dust, odour, artificial light, steam and smoke; traffic and transport; civil and military aviation; biodiversity and geological conservation; historic environment; landscape and visual; water quality and resources; flood risk and waste, 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 NPSs 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 applicants should assess these within their application and also the considerations that the Secretary of State should take into account in decision-making.
- 8.1.10 In addition to a number of the assessment principles and generic impacts covered by EN-1, NPSs EN-2, EN-4 and EN-5 set out the factors (e.g. those influencing site selection) and 'assessment and technology specific'

considerations to be taken into account in the preparation and assessment of applications for fossil fuel generating stations, gas pipelines and electricity network infrastructure, including relevant environmental matters. These are considered briefly below.

The NPS for Fossil Fuel Electricity Generating Infrastructure (EN-2)

- 8.1.11 EN-2 is one of the suite of technology specific NPSs that sit under EN-1. It deals specifically with fossil fuel infrastructure, including gas-fired generating stations.
- 8.1.12 EN-2 reiterates 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 the Government policy that all new gas-fired generating stations should be CCR (paragraph 2.3.4).
- 8.1.13 Part 2 of EN-2 deals with the assessment of and technology-specific information relevant to fossil fuel generating stations. This includes the factors influencing site selection (e.g. land use, transport infrastructure, water resources and grid connection); climate change adaptation; consideration of good design and also the potential impacts of generating stations to be taken into account in the preparation and consideration of the application for development consent. Potential technology-specific impacts include air emissions; landscape and visual; noise and vibration and water quality and resources. It is notable in respect of landscape and visual impacts that EN-2 (paragraph 2.6.5) acknowledges that it is not possible to eliminate such impacts entirely due to the scale of the buildings and structures associated with generating stations and that mitigation will therefore need to be aimed at reducing visual intrusion in the landscape and minimising impacts on visual amenity as far as reasonably practicable.

The NPS for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)

- 8.1.14 EN-4 is relevant to the Project as natural gas will be used as the fuel for the operation of the Electricity Generating Station and the Project includes a gas supply pipeline. The gas connection is 'associated development' as defined by Section 115 of the PA 2008.
- 8.1.15 Paragraph 1.1.1 (Part 1) states 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.

8.1.16 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.

The NPS for Electricity Networks Infrastructure (EN-5)

- 8.1.17 EN-5 is also relevant to the Project as it includes a new electrical grid connection between the Electricity Generating Station and the National Grid (the Tod Point substation) for the export of electricity. As with the gas connection, the electrical grid connection is 'associated development'.
- 8.1.18 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.

8.1.19 Marine Policy

- 8.1.20 As noted above, section 104 of the PA 2008 requires the Secretary of State to have regard to "...the appropriate marine policy documents..." relevant to the NSIP. Whilst the Project is an onshore generating station, a number of elements of the project involve works within the UK Marine Area (within or under the tidal River Tees and also below MHWS within the North Sea). These include the gas and cooling water connections, the wastewater disposal works and the CO₂ transport/export pipeline.
- 8.1.21 The appropriate marine policy documents are defined at section 59 of the Marine and Coastal Access Act 2009. These include any marine policy statement which is in effect and to the extent that a decision relates to a marine plan area, any marine plan which is in effect for that area (section 59(3) and (5)).
- 8.1.22 The UK Marine Policy Statement ('MPS'), adopted in March 2011 (HM Government, 2011), provides the policy framework for preparing marine plans and taking decisions affecting the marine environment. It has been prepared and adopted for the purposes of Section 44 of the Marine and Coastal Access Act 2009 and is intended to sit alongside terrestrial consenting regimes, including NSIP regime set by the PA 2008.

- 8.1.23 Chapter 2 of the MPS outlines the vision for the UK marine area, the high level approach to marine planning and general principles for decision making covering economic, social and environmental considerations.
- 8.1.24 Chapter 3 sets out the policy objectives for key activities that take place in the marine environment. Section 3.3 deals specifically with 'Energy production and infrastructure development'. Paragraph 3.3.1 notes that a secure, sustainable and affordable supply of energy is of central importance to the economic and social well-being of the UK. Paragraph 3.3.4 sets out issues that decision maker should take into account when examining and determining applications for energy infrastructure, including the national level of need for energy infrastructure set out in EN-1.
- 8.1.25 Paragraph 3.3.6 notes that the construction, operation or decommissioning of power stations may have impacts on the local marine environment through the construction of plants and associated development. There may also be impacts from abstraction and discharge of cooling water during operation. It refers to more detail on the impacts and specific measures and actions to avoid or minimise adverse impacts, including those on marine ecology, being contained within the NPSs, including EN-2 in respect of fossil fuel generating stations.
- 8.1.26 Marine plans are intended to set out detailed policy and spatial guidance for a particular area. The UK is divided into a number of marine planning regions with associated plan authorities that are responsible for preparing marine plans. In England the Marine Management Organisation is the plan authority.
- 8.1.27 The Site lies within the 'North East Inshore Marine Area', which stretches from Flamborough Head in Yorkshire to the Scottish Border. The Plan Area has three main tidal rivers, including the River Tees.
- 8.1.28 The consultation on the draft North East Marine Plan ran from 14 January to 20 April 2020. This was the final stage of statutory public consultation on the Plan prior to it being submitted to the Secretary of State for Environment, Food and Rural Affairs for adoption. Once published as a Consultation Draft, Marine Plans become a material consideration.
- 8.1.29 The North East Marine Plan is intended to provide a strategic approach to decision-making, considering future use and providing a clear approach to managing resources, activities and interactions within the area. In referring to Teesside, Tyneside and Wearside (paragraph 14), the Plan identifies that there are future opportunities for CCUS using existing oil and gas infrastructure.
- 8.1.30 The Plan contains a number of policies (Table 2). There are no specific policies on gas-fired generating stations. Policy NE-INF1 supports appropriate land-based infrastructure which facilitates marine activity and vice versa. Policy

NE-CCUS-2 supports CCUS proposals incorporating the re-use of existing oil and gas infrastructure. However, the Policy is clear that this does not mean that proposals that do not incorporate the re-use of infrastructure will be disadvantaged or rejected.

8.1.31 Other Matters that may be 'Important and Relevant'

- 8.1.32 As noted above, in making decisions on applications for NSIPs, section 104 of the PA 2008 states that the Secretary of State must also (in addition to the NPSs) have regard to any other matters that they consider to be both 'important and relevant' to their decision. Paragraph 4.1.5 of EN-1 provides some clarification on such matters, stating that these may include development plan documents or other documents in the local development framework.
- 8.1.33 EN-1 is clear (reflecting the terms of the PA 2008), however, that in the event of any conflict between a NPS and development plan documents, the NPS prevails for the purposes of Secretary of State decision-making given the national significance of the infrastructure concerned.

National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG)

- 8.1.34 The National Planning Policy Framework ('NPPF') was adopted in March 2012 and most recently updated in June 2019 (Ministry of Housing, Communities and Local Government, 2019) and replaced the majority of Planning Policy Statements and Planning Policy Guidance Notes. The policies contained within the NPPF are expanded upon and supported by the 'Planning Practice Guidance'.
- 8.1.35 The NPPF sets out the Government's planning policies for England and how these are to be applied. It is a material consideration in planning decisions. Paragraph 5 of the NPPF makes it clear that the document does not contain specific policies for NSIPs and that applications in relation to NSIPs are to be determined in accordance with the decision making framework set out in the PA 2008 and relevant NPSs, as well as any other matters that are considered both important and relevant. However, paragraph 5 goes on to confirm that the NPPF may be considered to be a matter that is both important and relevant for the purposes of assessing DCO applications.
- 8.1.36 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 NPPF, 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 well-designed 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.
- 8.1.37 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.
- 8.1.38 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 NSIPs where the public benefit would clearly outweigh the loss or deterioration of habitat.
- 8.1.39 NPPF policies of particular relevance include building a strong, competitive economy, promoting healthy and safe communities, 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.
- 8.1.40 Paragraph 148 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". [underlining added]

8.1.41 Paragraph 154 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. This is consistent with policy contained within NPS EN-1.

The Statutory Development Plan

- 8.1.42 The statutory development plan for the for the Project therefore comprises the following development plan documents ('DPDs'):
 - The Redcar & Cleveland Local Plan and Policies Map (adopted May 2018).
 - The Stockton-on-Tees Borough Council Local Plan and Policies Map (adopted January 2019).
 - The Tees Valley Joint Minerals and Waste DPDs (adopted September 2011).
- 8.1.43 The development plan policies of relevance to the Project are set out below:

Policy No.	Policy Document	Policy Title
SD1	RCBC Local Plan	Sustainable Development
SD2	RCBC Local Plan	Locational Policy
SD3	RCBC Local Plan	Development Limits
SD4	RCBC Local Plan	General Development Principles
SD6	RCBC Local Plan	Renewable and Low Carbon Energy
SD7	RCBC Local Plan	Flood and Water Management
ED6	RCBC Local Plan	Promoting Economic Growth
LS4	RCBC Local Plan	South Tees Spatial Strategy
N1	RCBC Local Plan	Landscape
N2	RCBC Local Plan	Green Infrastructure
N3	RCBC Local Plan	Open Space and Recreation
N4	RCBC Local Plan	Biodiversity and Geological Conservation
HE2	RCBC Local Plan	Heritage Assets
TA1	RCBC Local Plan	Transport and New Development
STDC1	South Tees Area SPD	Regeneration Priorities
STDC4	South Tees Area SPD	Economic Development Strategy
STDC6	South Tees Area SPD	Energy Innovation
STDC7	South Tees Area SPD	Natural Environmental Protection and
		Enhancement
STDC8	South Tees Area SPD	Preserving Heritage Assets
STDC10	South Tees Area SPD	Utilities
STDC11	South Tees Area SPD	North Industrial Zone
STDC12	South Tees Area SPD	North East Industrial Zone
STDC15	South Tees SPD	Coastal Community Zone

Policy No.	Policy Document	Policy Title
SD1	STBC Local Plan	Presumption in favour of Sustainable
		Development
SD2	STBC Local Plan	Strategic Development Needs
SD4	STBC Local Plan	Economic Growth Strategy
SD5	STBC Local Plan	Natural, Built and Historic Environment
SD6	STBC Local Plan	Transport and Infrastructure Strategy
SD7	STBC Local Plan	Sustainable Design Principles
EG4	STBC Local Plan	Seal Sands, North Tees and Billingham
EG5	STBC Local Plan	Durham Tees Valley Airport
T11	STBC Local Plan	Transport Infrastructure
ENV1	STBC Local Plan	Energy Efficiency
ENV2	STBC Local Plan	Renewable and Low Carbon Energy
		Generation
ENV4	STBC Local Plan	Reducing and Mitigating Flood Risk
ENV5	STBC Local Plan	Preserve, Protect and Enhance Ecological
		Networks, Biodiversity and Geodiversity
ENV7	STBC Local Plan	Ground, Air, Water, Noise and Light Pollution
HE2	STBC Local Plan	Conserving and Enhancing Stockton's
		Heritage Assets
MWC4	Minerals & Waste DPDs	Safeguarding of Mineral Resources from
		Sterilisation
MWC8	Minerals & Waste DPDs	General Locations for Waste Management
		Sites
MWC11	Minerals & Waste DPDs	Safeguarding of Port and Rail Facilities

UK Energy and Climate Change Policy and Reports

- 8.1.44 Recent and relevant UK energy and climate change documents establish clear objectives for decarbonising the power and industrial sectors and achieving the Government's legally binding commitment to achieve 'Net Zero' in terms of greenhouse gas emissions by 2050. This includes a number of national infrastructure plans and assessments; the Clean Growth Strategy; the UK CCUS Deployment Pathway; the Ten Point Plan; the Energy White Paper; and the Industrial Decarbonisation Strategy, amongst others. The Applicants consider that these matters, within the context of Section 104 of the PA 2008, are "relevant and important" to the Secretary of State's decision making on the Project. These documents include
 - National Infrastructure Plan (HM Treasury 2014) (the 'NIP 14') the NIP 14 builds upon the first NIP that was published in 2010. The NIP 14 sets out an ambitious vision for the UK's infrastructure, reinforcing the government commitment to investing in infrastructure and improving its quality and performance. The NIP 14 recognises the continuing need for new low carbon gas-fired power stations to provide back-up to less

- flexible renewable generation. The provision of such infrastructure is critical to ensuring that the National Grid can meet peak electricity demand as the amount of renewable generation increases.
- National Infrastructure Delivery Plan 2016-2021 (The Infrastructure and Ports Authority, 2016) (the 'NIDP') The NIDP 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. NIDP 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. It also includes support for industrial carbon capture on Teesside.
- National Infrastructure Assessment (The National Infrastructure Commission ('NIC'), 2018) ('NIA 18') the NIC has looked across different infrastructure sectors and came to independent conclusions based on the best available evidence. The foreword to the NIA 18 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. The NIA 18 sets out a number of recommendations 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 that the UK can and should have low cost and low carbon electricity, heat and waste.
- The Clean Growth Strategy (HM Government, 2017, amended 2018) (the 'CGS') 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. The CGS 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. It also focusses on removing uncertainty and working with industry to make CCUS a viable future option.
- Clean Growth The UK Carbon Capture Usage and Storage deployment pathway An Action Plan (HM Government, 2018) ('Action Plan') The Action Plan 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.

- 'Net Zero' by 2050 (HM Government, 2019) 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 greenhouse gas emissions by 2050. The Order amended the previous target (within the Climate Change Act 2008) which was seeking achievement of a reduction in greenhouse gas emissions of 80% by 2050 compared to 1990 levels. The commitment to achieve Net Zero by 2050 was based on the recommendations of the Climate Change Committee ('CCC') set out in its report 'Net Zero The UK's Contribution to Stopping Global Warming' (May, 2019) (the 'CCC Report'). The CCC Report is clear that if this target is to be achieved greenhouse gas emissions will need to be offset by schemes that are capable of taking away large amounts of emissions from the atmosphere. The CCC Report identifies CCUS as having a key role to play in mitigating greenhouse gas emissions.
- Net Zero Opportunities for the power sector (National Infrastructure Commission, 2020) ('Net Zero Report') The Net Zero Report responds to the Government's decision in June 2019 to legislate for a 'Net Zero' greenhouse gas emissions target for the whole economy by 2050, and takes account of the recommendations set out in the NIA 18. The Net Zero Report highlights the potential future role of CCS in decarbonising the power sector by capturing CO₂ from new gas-fired generation while also decarbonising industry supporting the generation of hydrogen and decarbonising industry generally.
- Reducing UK emissions: 2020 Progress Report to Parliament (Climate Change Committee ('CCC'), June 2020) ('Progress Report') The Progress Report (required under the Climate Change Act 2008) provides an annual review of UK progress in reducing greenhouse gas (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. The Progress Report sets out recommendations and priorities including that "... new hydrogen and carbon capture and storage (CCS) infrastructure which will be needed to support the next phase of the net-zero transition."
- The Ten Point Plan for a Green Industrial Revolution (HM Government, November 2020) ('Ten Point Plan') – The Ten Point Plan 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. The Ten Point Plan 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
- National Infrastructure Strategy: Fairer, faster, greener (HM Treasury, November 2020) ('NIS') 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 National Infrastructure Commission's recommendations on infrastructure provision in their National Infrastructure Assessment (July 2018). The NIS recognises the role of CCS in contributing to the Net Zero target, and that 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.
- The Energy White Paper (HM Government, December 2020) ('EWP') The EWP was presented to Parliament in December 2020 and builds on the Prime Minister's Ten Point Plan. 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.
- Industrial Decarbonisation Strategy (HM Government, March 2021)

 ('IDS') The IDS is the first strategy published by a major economy which sets out how industry can be decarbonised in line with Net Zero, while remaining competitive and without pushing emissions abroad. It builds on the Ten Point Plan and sets out the Government's vision for a prosperous, low carbon UK industrial sector by 2050 and aims to provide industry with the long-term certainty it needs to invest in decarbonisation. The Ministerial Foreword emphasises that the 2020s will be crucial to industrial decarbonisation, with the UK needing to deploy key technologies such as CCUS while beginning the journey of switching from fossil fuel combustion to low carbon alternatives such as hydrogen.
- North Sea Transition Deal (Department for Business, Energy & Industrial Strategy and OGUK, March 2021) ('North Sea Deal')- The North Sea Deal is a transformational sector deal for the offshore oil and gas sector in recognition of the key role that it can play in helping the UK meets its net zero commitments. The document recognises that with declining output of hydrocarbons from the UK Continental Shelf ('UKCS') and a projected decline in domestic demand, there is a clear need for determined action to be taken to build on the proven capabilities and skills within the existing

sector to support the transition to net zero. The North Sea Deal is aimed at delivering on the commitments set out in the oil and gas chapter of the EWP and is closely aligned with the Prime Minister's Ten Point Plan. It does this through the implementation of a number of commitments and measures, including supporting up to 40,000 direct and indirect supply chain jobs in decarbonising UKCS production and the CCUS and hydrogen sectors.

8.1.45 **Summary**

- 8.1.46 The NPSs form the primary basis for decisions by the Secretary of State on applications for NSIPs. In addition to setting out the strong need for new energy infrastructure, they provide detailed guidance on the matters to take into account when both preparing and assessing applications for NSIPs. They (and section 104 of the PA 2008) also confirm that the Secretary of State must have regard to any other matters that they consider are both 'important and relevant', which can include the NPPF and local development plan policy. Both the NPS and NPPF are clear, however, that in the event of any conflict between a NPS and another document, the NPS prevails. There is also a considerable amount of recent UK policy and other reports relating to energy and climate change, focussed on the urgent need for decarbonisation and the role of technologies including CCS/CCUS in this respect. These documents will also be 'important and relevant' matters.
- 8.1.47 The Application includes a detailed assessment of the Project, taking account of the findings of the EIA as reported within the ES, against the relevant NPSs and other relevant policy documents such as the NPPF, local development plan and energy and climate change policy. Further information on this is set out in Chapter 7 of the ES (Volume I, Document Ref. 6.2), and the Planning Statement (Document Ref. 5.3), and policy specific to each topic assessed in the ES is considered in the relevant technical chapters (chapters 8-20, Volume I, Document Ref. 6.2).

9.0 **SPECIAL CONSIDERATIONS**

9.1.1 Crown Land

- 9.1.2 There are Crown interests within the Order Limits as follows:
 - Plot 218 being land of river (River Tees), bed and banks thereof;
 - Plot 371, 528 being land of foreshore and shoreline north of industrial premises known as Steel Works, Redcar; and
 - Plot 530 being land of foreshore at Coatham Sands, Redcar.
- 9.1.3 All are owned by The Queen's Most Excellent Majesty and are therefore 'Crown Land'. The areas are shown on the Crown Land Plan (Document Ref. 4.3).
- 9.1.4 The Order (Document Ref. 2.1) includes the standard article providing that the Order does not prejudicially affect any estate (etc.) of the Crown, and that the undertaker may not enter on or take any Crown land other than with the consent of the appropriate authority (article 43). Articles permitting powers of compulsory acquisition (22 and 25) specifically provide that they are subject to Article 43. The Book of Reference (Document Ref. 3.1) also excludes interests belonging to the Crown in the description of the relevant plots.
- 9.1.5 The Applicants have been negotiating with the Crown Estate Commissioners in order to secure the rights and access necessary to carry out the relevant parts of Work Nos. 5A, 5B, 6 and 8, and to obtain the consent of the Crown to the inclusion of provisions applying in relation to Crown land (as required by section 135 of the PA 2008). The Applicants will continue these discussions following submission of the Application.

9.1.6 **Special Category Land – Open Space etc**

- 9.1.7 Section 132 of the PA 2008 applies to the compulsory acquisition of new rights over land forming part of a common, open space or fuel or field garden allotment. For the purposes of section 132, "open space" has the same meaning as in section 19 of the Acquisition of Land Act 1981:
 - "means any land laid out as a public garden, or used for the purposes of public recreation, or land being a disused burial ground."
- 9.1.8 The parts of the Order Land which are open space are shown hatched blue on the Land Plans (Document Ref. 4.2) and identified in the Book of Reference (Document Ref. 3.1) (the "Open Space Land"). This comprises parts of the foreshore and beach at Coatham Sands and parts of Coatham Sand Dunes.

9.1.9 The Open Space Land is used for public recreation including walking, dog walking, bird watching, jogging, and (in respect of the foreshore and beach) fishing.

Access to the Open Space Land

9.1.10 Details of the plots within the Order Land that comprise of the Open Space Land, and related ownership, are set out in Table 9.1.

Table 9.1 Open Space Land

Plot	Freehold or Reputed Freehold Owner	Lessees or Tenants or Reputed Lessees or Tenants	Occupier or Reputed Occupiers
306	South Tees Development Limited		South Tees Development Limited
307	South Tees Development		South Tees
307	Limited		Development Limited
310	South Tees Development		South Tees
	Limited		Development Limited
311	South Tees Development		South Tees
	Limited		Development Limited
312	South Tees Development		South Tees
	Limited		Development Limited
326	South Tees Development		South Tees
	Limited		Development Limited
379	South Tees Development		South Tees
	Limited		Development Limited
			Teesside Windfarm
			Limited
448	South Tees Development		South Tees
	Limited		Development Limited
			Teesside Windfarm
			Limited
494	Unregistered/ unknown		Unregistered/
			unknown
499	Redcar and Cleveland		Redcar and Cleveland
	Borough Council		Borough Council
501	Unregistered/ unknown		Unregistered/
			unknown
526	Redcar and Cleveland		Redcar and Cleveland
	Borough Council		Borough Council
	South Tees Development		South Tees
	Limited		Development Limited
527	Redcar and Cleveland		Redcar and Cleveland
	Borough Council		Borough Council

Plot	Freehold or Reputed Freehold Owner	Lessees or Tenants or Reputed Lessees	Occupier or Reputed Occupiers
		or Tenants	
528	The Queen's Most		The Queen's Most
	Excellent Majesty in right		Excellent Majesty in
	of Her Crown		right of Her Crown
529	Redcar and Cleveland		Redcar and Cleveland
	Borough Council		Borough Council
539	Redcar and Cleveland		Redcar and Cleveland
	Borough Council		Borough Council

- 9.1.11 The works forming part of the Project that will be located on the Open Space Land comprise of:
 - (a) The refurbishment of part of the existing water discharge pipeline in the Water Discharge Connection Corridor (Work No. 5A);
 - (b) The installation of part of the replacement water discharge pipeline in the Water Discharge Connection Corridor (Work No. 5B);
 - (c) The installation of part of the CO₂ Export Pipeline (Work No. 8)
- 9.1.12 Only Work No. 5A or Work No. 5B will be required, not both.
- 9.1.13 The locations of these works are shown on the Works Plans (Document Ref. 4.4).
- 9.1.14 The Applicants are not seeking to compulsorily acquire any part of the Open Space Land (i.e. to acquire the freehold interest), but have included powers to compulsorily acquire new rights over the Open Space Land, for the purposes of constructing, maintaining and operating the works set out above.
- 9.1.15 Section 132(2) of the PA 2008 states that the Order, to the extent that it authorises the compulsory acquisition of a right over open space land by the creation of a new right over land, shall be subject to special parliamentary procedure unless:
 - (a) the Secretary of state is satisfied that one of the exceptions under S132(3) to (5) applies; and
 - (b) that fact, and the exception under the relevant subsection of S132(3) to (5), are recorded in the Order (or other document containing the Order).
- 9.1.16 The exceptions in S132(4) and (5) are not relevant to the Project. Section 132(3) provides that special parliamentary procedure is not required if the

Order Land, when burdened with the rights under the Order, will be "no less advantageous than it was before" to the following persons:

- (a) the persons in whom it is vested;
- (b) other persons, if any, entitled to rights of common or other rights; and
- (c) the public.
- 9.1.17 The Open Space Land is vested in the parties noted in Table 9.1 above, and is used by the public for the purposes set out above. The Applicants are not aware of any other persons entitled to rights of common or other rights.
- 9.1.18 The proposed methodology for carrying out the works within the Open Space Land is as follows:

Refurbishment of existing water discharge outfall tunnel

- (a) The existing outfall tunnel (plots 297, 304, 305, 306, 307, 308, 310, 311, 312, 326, 371) is still operational for small discharges. However, the condition of the tunnel for long term use for the Project is unconfirmed by its owner, STDC. If it is possible to re-use the existing outfall tunnel, any maintenance activities are likely to be minor (see below).
- (b) Works for the refurbishment of the existing outfall tunnel may also include the emplacement of an outfall head within the Order Land. These works would be located on Crown land (plot 371) at the seaward extent of the outfall tunnel. See paragraph 9.1.2 (Crown Land).

<u>Installation of part of the replacement water outfall tunnel</u>

- (a) The installation of the replacement water outfall tunnel will only be required if it is not possible to re-use the existing water discharge outfall tunnel. As the condition of the existing outfall is unconfirmed, it is necessary to retain rights and powers to carry out both works in the Order.
- (b) The Applicants will install the replacement outfall tunnel under the Open Space Land (at plots 377, 378, 379, 448, 494, 499, 501, 526, 527, 528, 529, 530, 539) using horizontal directional drilling, or another form of trenchless technology.
- (c) The installation will not involve any works taking place on the surface of the Open Space Land which would have an effect on access to the

Open Space Land. The Open Space Land should not be affected by the installation of the apparatus, and access should remain open throughout the construction period.

Installation of part of the CO₂ Export Pipeline

- (a) The installation of the CO₂ Export Pipeline would be located within the same corridor as and parallel to the replacement water discharge outfall tunnel (plots 377, 378, 379, 392, 402, 415, 429, 447, 448, 494, 499, 501, 526, 527, 528, 529, 530, 539). The order of works will be established during detailed design.
- (b) The installation of the CO₂ Export Pipeline under the Open Space Land (at plots 379, 448, 494, 499, 501, 526, 527, 528, 529, 539) will be using horizontal directional drilling, or another form of trenchless technology.
- (c) As with the installation of the replacement outfall tunnel, the installation of the CO₂ transport / export pipeline will not involve any physical works taking place on the surface of the Open Space Land such as to have an effect on access to the Open Space Land.
- (d) Initial testing and start-up and pressurisation with product CO₂ of the installed pipeline may necessitate temporary restrictions on access to the Open Space Land. However, the restrictions would be over a limited area of the Open Space Land. The duration of restrictions would depend on the length of pipeline being tested but would be expected to be for very short periods:
 - (i) If it was only the section of pipeline under the Open Space Land that was being tested, the testing and related restrictions on use of part of the Open Space Land would be expected to be limited to approximately four hours;
 - (ii) If it was the entire pipeline undergoing a test (which the Applicants consider unlikely at this stage) that may restrict access to part of the Open Space Land for a maximum period of 24 hours.
- (e) During detailed engineering the Applicants or its appointed EPC contractor would be expected to undertake work to identify how restrictions on the use of the Open Space Land could be further limited or avoided. This type of testing and start-up works would also typically be done at night where possible in order to have a negligible impact on users of the surface land.

Maintenance

- (a) Maintenance of the existing water discharge outfall tunnel, replacement water discharge tunnel and CO₂ Export Pipeline will principally be by way of occasional walkover, (or flyover by remotely operated vehicle for underwater portions) consisting of mainly non-intrusive inspections. Design codes or operational requirements may require intelligent pigging systems to be run down (inside) the CO₂ Export Pipeline line during production to assess the internal condition of the infrastructure. However, no restrictions on access to Open Space Land are expected during these inspections.
- (b) Intrusive maintenance will only occur if faults occur in the infrastructure, or maintenance necessitates replacement of infrastructure. Maintenance will be short in duration and infrequent and will not require the fencing of large linear areas.
- 9.1.19 As set out above, no permanent surface installation works will be required within the Open Space Land. The Applicants are seeking powers in the draft Order for the temporary possession of land as well as the acquisition of new rights, rather than outright freehold compulsory acquisition of the land, for installation of new infrastructure and related maintenance activities.
- 9.1.20 There is no operational need for the Applicants to take the freehold of any part of the Open Space Land, as the use of the temporary possession and new rights powers is more proportionate in the circumstances, allowing the use of the relevant land to remain with / revert back to the relevant landowner. Rights permitting the Applicants' infrequent use of the Open Space Land, including easements to retain the apparatus underground and to access it for maintenance, may be compulsorily acquired and these rights are included in the Order.

9.1.21 In summary:

- (a) the physical appearance of the Open Space Land will be unaffected;
- (b) the use of the Open Space Land for recreation will carry on uninterrupted except for potential restrictions over limited areas of the Open Space Land for short periods, and typically during the night, during initial testing and pressurisation of the CO₂ Export Pipeline. Further mitigation measures would be expected to be undertaken by the Applicants or its appointed EPC contractor to further limit or avoid restrictions on the use of the Open Space Land during such periods; and

- (c) public access to the Open Space Land will not be permanently affected.
- 9.1.22 The Applicants therefore consider that the test under section 132(3) of the PA 2008 is satisfied. The Open Space Land, when burdened with the rights to install, inspect and maintain the elements of the Project described above, will not be any less advantageous to persons in whom it is vested, other persons, if any, if entitled to rights of common or other rights, and to the public. The Applicants have included in the preamble to the draft DCO (Document Ref. 2.1) a statement as regards to compliance with section 132(3), as required.
- 9.1.23 No fuel or field garden allotment is included in or affected by the Order Land.
- 9.1.24 Land or apparatus owned or operated by statutory undertakers or other third parties
- 9.1.25 The Applicants have identified that the following statutory undertakers own or operate land or apparatus within the Order Limits:
 - (a) National Grid Electricity Transmission Plc and National Grid Gas plc;
 - (b) Network Rail Infrastructure Limited;
 - (c) Northern Gas Networks Limited;
 - (d) Northern Powergrid (Northeast) plc and Northern Powergrid Limited;
 - (e) Northumbrian Water Limited;
 - (f) PD Teesport Limited;
 - (g) Telefonica UK Limited; and
 - (h) Vodafone and Cornerstone Telecoms.
- 9.1.26 The draft DCO (Document Ref. 2.1) includes both protective provisions in respect of relevant types of statutory undertakers and bespoke protective provisions for some statutory undertakers (National Grid, Network Rail, Northern Powergrid, PD Teesport) (see article 41 and Schedule 12), and the Applicants are seeking to agree the form of protective provisions with the relevant statutory undertakers.
- 9.1.27 Article 33 of the draft DCO gives the undertaker certain powers in relation to compulsory acquisition and acquisition of rights in statutory undertakers within the Order Land. That article is subject to the protective provisions included at Schedule 12 of the draft DCO, which provide adequate protection for statutory undertakers' assets. Accordingly, the Applicants consider that

the statutory undertakers will not suffer serious detriment to the carrying on of their undertaking. The tests set out in sections 127(3) and 127(6) of the PA 2008 are therefore satisfied.

- 9.1.28 Various statutory undertakers and owners of apparatus have a right to keep equipment (in connection with their undertaking) on, in or over the Order Land. Statutory undertakers and other apparatus owners that are known to have equipment on, in or over the Order Land are included in the Book of Reference. Section 138 of the PA 2008 applies if a development consent order authorises the acquisition of land (compulsorily or by agreement) and there subsists over the land a 'relevant right', or there is 'relevant apparatus' on, under or over the land. The draft DCO includes provision to authorise the extinguishment of a relevant right, or the removal of relevant apparatus belonging to statutory undertakers, in connection with the delivery of the Project.
- 9.1.29 The exercise of such powers will be carried out in accordance with the protective provisions contained in Schedule 12 to the draft DCO. The protective provisions will be agreed with the relevant statutory undertakers and electronic communications apparatus owners, and will accordingly set out constraints on the exercise of the powers in the DCO, with a view to safeguarding the statutory undertakers' and electronic communications apparatus owners' interests, whilst enabling the Project (i.e. the development authorised by the DCO) to proceed. The Applicants therefore consider that the test set out in section 138 of the PA 2008 is satisfied.
- 9.1.30 Whilst the Electricity Generating Station and CO₂ compressor station will be located on part of the Teesworks Site (part of the former Redcar Steel Works Site), which is land controlled by a single owner (the South Tees Development Corporation), the generating station connections and the CO₂ Gathering Network extend across areas of land with a variety of landowners and occupiers (who are not statutory undertakers) with rights of access, business operations or who own or operate apparatus such as pipelines. The Applicants are therefore seeking to agree protective provisions with these parties to ensure they have the ability to continue their operations, access their property and have the ability to exercise approval in relation to aspects of the Project that have the potential to affect or interact with their interests or assets. These parties are listed below:
 - (a) Air Products Public Limited Company;
 - (b) Cats North Sea Limited;
 - (c) CF Fertilisers UK Limited;
 - (d) Exolum Seal Sands Ltd;

- (e) INEOS Nitriles (UK) Limited;
- (f) Marlow Foods Limited;
- (g) NPL Waste Management Limited;
- (h) Redcar Bulk Terminal Limited;
- (i) Sabic UK Petrochemicals Limited;
- (j) Sembcorp Utilities (UK) Limited;
- (k) Suez Recycling and Recover UK Limited;
- (I) Teesworks Limited; and
- (m) York Potash Limited and Sirius Minerals.
- 9.1.31 Given the heavily industrialised nature of the Site, there is the potential for interactions with other privately owned or operated apparatus (that is, apparatus not owned or operated by statutory undertakers). The draft DCO (Schedule 12, Document Ref. 2.1) includes provisions typically included in DCOs for the protection of electricity, gas, water and sewerage undertakers. That set of protective provisions has been amended so that it also applies to any other mains, pipelines and cables that would not otherwise fall within the terms of the standard drafting, and which are not protected by any of the bespoke protective provisions for third parties listed above.
- 9.1.32 The position in terms of negotiations with statutory undertakers and third parties with respect to protective provisions is set out in the Compulsory Acquisition Schedule.
- 9.1.33 There are no other relevant special considerations in respect of the Site.

10.0 OTHER CONSENTS AND ORDERS

10.1.1 Other permissions, consents and orders

- 10.1.2 The Applicants require various other consents, as well as a DCO, in order to build, operate and maintain the Project. The Other Consents and Licences (Document Ref. 5.11) sets out the additional consents required and when they will be applied for. The key consents are identified below and reference should be made to Other Consents and Licences for the full list and the position as regards the need for and obtaining each consent:
 - Marine licence deemed marine licences are sought within the draft DCO (Document Ref. 2.1) for those elements of the Project which are below mean high water springs and where no exemption for the need for a marine licence applies;
 - Environmental permits in respect of the operation of the Electricity
 Generating Station and potentially in relation to activities affecting flood risk and discharge of surface water;
 - Hazardous substance consent (if required);
 - Land drainage consent;
 - Lower tier COMAH licence (if required);
 - Electricity generation licence; and
 - Greenhouse gas permit.
- 10.1.3 The Applicants are not aware of any reason why these and other consents required would not be granted and therefore does not consider that they represent an impediment to the Project proceeding.

10.1.4 Off-shore Elements

- 10.1.5 The following parts of the wider project will be located off-shore and are not part of the Application (but are required in order to allow the onward transport and offshore storage of the captured carbon dioxide):
 - installation of the continuation of the CO₂ export pipeline from below MLWS to the Endurance geological storage facility (known as 'Endurance'), located beneath the North Sea approximately 145 km to the east south-east of Teesside; and
 - the construction of either a sub-sea injection system or an un-manned platform for the injection of exported CO₂ using a well or wells drilled into the underground storage reservoir over 1,000 m below sea level.

The injection wells will be drilled and completed using an appropriate mobile offshore drilling unit.

- 10.1.6 The key consents required for the off-shore elements are listed below, and expanded upon in the Other Consents and Licences (Document Ref. 5.11):
 - Carbon dioxide storage licence the Endurance geological storage facility will be operated under a licence from the Oil and Gas Authority ('OGA') and regulated by the OGA under a storage permit (pursuant to section 17 of the Energy Act 2008);
 - Grant of appropriate rights from the Crown Estate;
 - Marine licence sought from the Marine Management Organisation; and
 - Pipeline Works Authorisation required for the continuation of the CO₂ Export Pipeline.
- 10.1.7 The Applicants are not aware of any reason why these and other consents required would not be granted and therefore does not consider that they represent an impediment to the Project proceeding.

11.0 **HUMAN RIGHTS**

- 11.1.1 The Human Rights Act 1998 incorporated into UK law the European Convention on Human Rights ('the Convention'). The Convention includes provisions in the form of Articles, the aim of which is to protect the rights of the individual.
- 11.1.2 The following Articles of the Convention are relevant to the Secretary of State's decision as to whether the Order should be made so as to include powers of compulsory acquisition.

11.1.3 Article 1 of the First Protocol to the Convention

11.1.4 This provides the right of everyone to the peaceful enjoyment of possessions and provides that no one can be deprived of their possessions except in the public interest and subject to the relevant national and international laws and principles.

11.1.5 Article 6

11.1.6 This entitles those affected by the powers sought in the Order to a fair and public hearing of any relevant objections they may have to the granting of those powers. This includes property rights and can include opportunities to be heard in the decision making process.

11.1.7 Article 8

11.1.8 This protects private and family life, home and correspondence. No public authority can interfere with these rights except in accordance with the law, and so far as is necessary in the interest of national security, public safety or the economic well-being of the country.

11.1.9 **Overview**

- 11.1.10 The Secretary of State, as the decision maker, is under a duty to consider whether the exercise of powers interacts with the rights protected by the Convention.
- 11.1.11 The Order has the potential to infringe the human rights of persons who own property or hold interests in the land within the Order Limits under Article 1 of the First Protocol. Such an infringement is authorised by law so long as:
 - the statutory procedures for making the Order are followed and there is a compelling case in the public interest for the inclusion of powers of compulsory acquisition in the Order; and
 - the interference with the convention right is proportionate.

- 11.1.12 In preparing the Application, the Applicants have considered the potential infringement of the Convention rights in consequence of the inclusion of compulsory acquisition powers within the Order. The Applicants consider that there would be very significant public benefits arising from the making of the Order for the Project (as set out in previous sections of this Statement and in the Project Need Statement (Document Ref. 5.2) and Planning Statement (Document Ref. 5.3)). Those benefits can only be realised if the Order includes compulsory acquisition powers, and the purpose for which the land is sought (to build and operate the Project) is legitimate. The Applicants consider, on balance, that the significant public benefits outweigh the effects on persons who own interests in relevant land or who may be affected by the Project.
- 11.1.13 The Applicants consider that there is a compelling case in the public interest for the exercise of such powers of compulsory acquisition.
- 11.1.14 For those affected by expropriation or dispossession, compensation is payable in accordance with the statutory compensation code. The Funding Statement (Document Ref. 3.3) confirms the availability of funds to meet these liabilities.
- 11.1.15 In relation to Article 6, there has been opportunity to make representations regarding the preparation of the Application. In accordance with Part 5 of the PA 2008, the Applicants have consulted with persons set out in the categories contained in Section 44 of the PA 2008, which includes owners of land affected and those who may be able to make claims either under Sections 7 and 10 of the Compulsory Purchase Act 1965 in respect of injurious affection or under Part 1 of the Land Compensation Act 1973. The beneficiaries of rights overridden by the exercise of powers in the Order can make claims under Section 10 of the Compulsory Purchase Act 1965.
- 11.1.16 Following acceptance of the Application, 'relevant representations' can be made in response to the notice which the Applicants are obliged to give pursuant to Section 56 of the PA 2008. These are then considered during the examination of the Application by the examining authority, in any written representations procedure which the examining authority decides to hold or at any compulsory purchase hearing held under Section 92 of the PA 2008. There are further opportunities for affected persons to be involved in the examination process, including submitting detailed written representations, responding to matters raised by the examining authority and at other types of hearings that may be held.
- 11.1.17 Should the Order be made, any person aggrieved may challenge the Order in the High Court if they consider that the grounds for doing so are made out, pursuant to Section 118 of the PA 2008.

- 11.1.18 In relation to matters of compensation for land to be acquired, affected persons have the right to apply to the Upper Tribunal (Lands Chamber) to determine the compensation payable.
- 11.1.19 For the above reasons, any infringement of the Convention rights of those whose interests are affected by the inclusion in the Order of powers of compulsory acquisition, is proportionate and legitimate and is in accordance with national and European law. For the reasons set out in Section 7 and 8 of this Statement, the Applicants consider that there is a compelling case in the public interest for the exercise of such powers of compulsory acquisition.
- 11.1.20 The Applicants consider that it would, therefore, be appropriate and proportionate for the Secretary of State to make the Order, including the compulsory acquisition powers sought.

12.0 FURTHER INFORMATION

12.1.1 **Negotiations**

12.1.3 Compensation

- 12.1.4 Provision is made by statute for compensation for the compulsory acquisition of land. Helpful information is given in the series of booklets published by the Department for Communities and Local Government.
 - Booklet No. 1 Compulsory Purchase Procedure;
 - Booklet No. 2 Compensation to Business Owners and Occupiers;
 - Booklet No. 3 Compensation to Agricultural Owners and Occupiers;
 - Booklet No.4 Compensation for Residential Owners and Occupiers; and
 - Booklet No.5 Reducing the Adverse Effects of Public Development: Mitigation Works.
- 12.1.5 Copies of these booklets are obtainable, free of charge, from:

 https://www.gov.uk/government/collections/compulsory-purchase-system-guidance

13.0 **CONCLUSION**

- 13.1.1 The Applicants submit, for the reasons explained in this Statement, that the inclusion of powers of compulsory acquisition in the Order for the purposes of the Project meets the conditions of Section 122 of the PA 2008, as well as the considerations in the CA Guidance.
- 13.1.2 The acquisition of land and rights and the temporary use of land, together with the overriding of interests, rights and restrictive covenants and the suspension or extinguishment of private rights, is no more than is reasonably required to facilitate or is incidental to the Project. Furthermore, the land identified to be subject to compulsory acquisition is no more than is reasonably necessary for that purpose and is proportionate, as is shown in the Order (Document Ref. 2.1), the Works Plans (Document Ref. 4.4) and other information both in this Statement and in other documents accompanying the Application.
- 13.1.3 The need for the Project, suitability of the Site and the support for such projects is clearly set out in NPS EN-1, NPS EN-1, EN-2, EN-4 and EN-5 as well as various UK policy documents on energy and climate change. These demonstrate that there is a compelling case in the public interest for the land to be acquired compulsorily.
- 13.1.4 The Applicants have set out clear and specific proposals for how the Site will be used.
- 13.1.5 All reasonable alternatives to compulsory acquisition have been explored. Given the national and local need for the Project and the support for it found in policy, as well as the suitability of the Order Land (for the reasons outlined above), compulsory acquisition of the land and rights and the temporary use of land, together with the overriding of interests, rights and restrictive covenants and the suspension or extinguishment of private rights is justified.
- 13.1.6 The Applicants have sought to acquire the required interests and the rights to occupy land temporarily by agreement, and will continue to do so. The powers of compulsory acquisition and to occupy land are required to ensure that the Project can be constructed, maintained and operated.
- 13.1.7 The proposed interference with the rights of those with an interest in the Order Land is for a legitimate purpose, namely the Project, and is necessary and proportionate to that purpose. The Applicants consider that the very substantial public benefits to be derived from the proposed compulsory acquisition would decisively outweigh the private loss that would be suffered by those whose land or interests are to be acquired, and therefore justifies interfering with that land or rights.

13.1.8 The requisite funds are available to meet any costs of land acquisition and compensation payable as a result of the use of powers of compulsory acquisition.