

# Net Zero Teesside Project

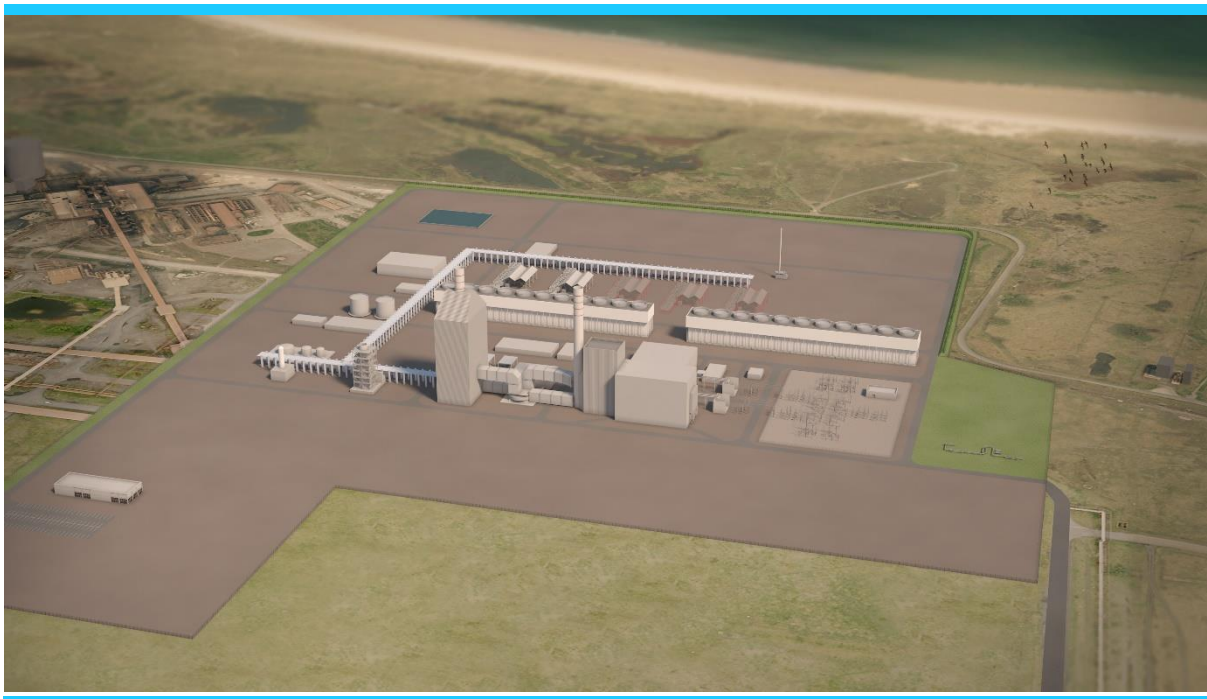
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Land at and in the vicinity of the former Redcar Steel Works site, Redcar and in Stockton-on-Tees, Teesside

The Net Zero Teesside Order

Document Reference: 9.31 – Response to Examining Authority’s Written Question DLV 1.7  
ii

Planning Act 2008



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

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## GLOSSARY

<b>Abbreviation</b>	<b>Description</b>
BEIS	The Department for Business, Energy and Industrial Strategy
CCGT	Combined Cycle Gas Turbine
CCUS	Carbon Capture, Utilisation and Storage
CO <sub>2</sub>	Carbon dioxide
DCO	Development Consent Order
ES	Environmental Statement
ExA	Examining Authority
FEED	Front End Engineering Design
km	Kilometres
NZT	The Net Zero Teesside Project
NZT Power	Net Zero Teesside Power Limited
NZNS Storage	Net Zero North Sea Storage Limited
PA 2008	Planning Act 2008
PCC	Power Capture and Compressor Site
PINS	Planning Inspectorate
SoS	Secretary of State
STDC	South Tees Development Corporation

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## CONTENTS

<b>1.0</b>	<b>Introduction .....</b>	<b>4</b>
<b>2.0</b>	<b>Design Approach .....</b>	<b>Error! Bookmark not defined.</b>
<b>3.0</b>	<b>Cumulative Relationship .....</b>	<b>Error! Bookmark not defined.</b>
<b>4.0</b>	<b>Future Design Development.....</b>	<b>Error! Bookmark not defined.</b>
<b>5.0</b>	<b>Summary .....</b>	<b>Error! Bookmark not defined.</b>

## 1.0 INTRODUCTION

### 1.1 Overview

1.1.1 This response to the Examining Authority's Written Question DLV 1.7 ii (Document Ref. 9.7) has been prepared on behalf of Net Zero Teesside Power Limited and Net Zero North Sea Storage Limited (the 'Applicants'). It relates to the application (the 'Application') for a Development Consent Order (a 'DCO'), that has been submitted to the Secretary of State (the 'SoS') for Business, Energy and Industrial Strategy ('BEIS'), under Section 37 of 'The Planning Act 2008' (the 'PA 2008') for the Net Zero Teesside Project (the 'Proposed Development').

1.1.2 The Application was submitted to the SoS on 19 July 2021 and was accepted for Examination on 16 August 2021. A change request made by the Applicants in respect of the Application was accepted into the Examination by the Examining Authority on 6 May 2022.

### 1.2 Description of the Proposed Development

1.2.1 The Proposed Development will work by capturing CO<sub>2</sub> from a new the gas-fired power station in addition to a cluster of local industries on Teesside and transporting it via a CO<sub>2</sub> transport pipeline to the Endurance saline aquifer under the North Sea. The Proposed Development will initially capture and transport up to 4Mt of CO<sub>2</sub> per annum, although the CO<sub>2</sub> transport pipeline has the capacity to accommodate up to 10Mt of CO<sub>2</sub> per annum thereby allowing for future expansion.

1.2.2 The Proposed Development comprises the following elements:

- **Work Number ('Work No.') 1** – a Combined Cycle Gas Turbine electricity generating station with an electrical output of up to 860 megawatts and post-combustion carbon capture plant (the '**Low Carbon Electricity Generating Station**');
- **Work No. 2** – a natural gas supply connection and Above Ground Installations ('AGIs') (the '**Gas Connection Corridor**');
- **Work No. 3** – an electricity grid connection (the '**Electrical Connection**');
- **Work No. 4** – water supply connections (the '**Water Supply Connection Corridor**');
- **Work No. 5** – waste water disposal connections (the '**Water Discharge Connection Corridor**');
- **Work No. 6** – a CO<sub>2</sub> gathering network (including connections under the tidal River Tees) to collect and transport the captured CO<sub>2</sub> from industrial emitters (the industrial emitters using the gathering network will be responsible for consenting their own carbon capture plant and connections to the gathering network) (the '**CO<sub>2</sub> Gathering Network Corridor**');
- **Work No. 7** – a high-pressure CO<sub>2</sub> compressor station to receive and compress the captured CO<sub>2</sub> from the Low Carbon Electricity Generating Station and the

CO<sub>2</sub> Gathering Network before it is transported offshore (the '**HP Compressor Station**');

- **Work No. 8** – a dense phase CO<sub>2</sub> export pipeline for the onward transport of the captured and compressed CO<sub>2</sub> to the Endurance saline aquifer under the North Sea (the '**CO<sub>2</sub> Export Pipeline**');
- **Work No. 9** – temporary construction and laydown areas, including contractor compounds, construction staff welfare and vehicle parking for use during the construction phase of the Proposed Development (the '**Laydown Areas**'); and
- **Work No. 10** – access and highway improvement works (the '**Access and Highway Works**').

1.2.3 The electricity generating station, its post-combustion carbon capture plant and the CO<sub>2</sub> compressor station will be located on part of the South Tees Development Corporation ('STDC') Teesworks area (on part of the former Redcar Steel Works Site). The CO<sub>2</sub> export pipeline will also start in this location before heading offshore. The generating station connections and the CO<sub>2</sub> gathering network will require corridors of land within the administrative areas of both Redcar and Cleveland and Stockton-on-Tees Borough Councils, including crossings beneath the River Tees.

### **1.3 The Purpose of this Document**

1.3.1 The purpose of this document is to support the Applicants' response to the Examining Authority's Written Question DVL.1.7 ii [Document Ref. 9.7], which notes:

- "ES Chapter 17 [APP-099] section 17.4 and ES Appendix 17A [APP-335] set out the baseline conditions, including an assessment of landscape and seascape character. The baseline is informed by local Landscape Character Assessments (LCAs) prepared by RCBC, STBC and HBC. The Applicants are asked to:
- Review the baseline since the Landscape and Visual Impact Assessment (LVIA) and viewpoints were produced and provide an update to the description of the landscape character baseline to reflect any changes since the publication of the LCAs to the extent necessary to provide a robust position to undertake the impact assessment. For example, it is noted that the description of the East Billingham to Teesmouth landscape character area within STBC's LCA references SSSI at Seal Sands and Cowpen Marsh, which have subsequently been incorporated into the Teesmouth and Cleveland Coast SSSI and/ or been partially de-notified".

1.3.2 The purpose of this document is also to support The Applicant's response to the Action Points at Issues Specific Hearing 4 [EV8-006], which notes:

- "Provide updated visualisations for Viewpoint 2".

## 2.0 LANDSCAPE BASELINE

- 2.1.1 The Applicants have undertaken a review of the landscape and visual baseline in relation to question DVL 1.7 ii and the review has not identified any changes to the assessment as reported within ES Chapter 17 [APP-099].
- 2.1.2 Specifically in relation to the Billingham to Teesmouth Landscape Character Area (LCA) the following baseline changes have been made, although none of these affect the assessment as reported in ES Chapter 17 [APP-099].
- 2.1.3 Since the publication of the Stockton-on-Tees Landscape Character Assessment in 2011 Natural England undertook reviews on the status and extent of protection of areas around the Teesmouth and Cleveland coast, including Seal Sands and Cowpen Marsh.
- 2.1.4 The proposed extensions to the Teesmouth and Cleveland Coast SPA and Ramsar were confirmed on the 18<sup>th</sup> April 2019 [Natural England (2019), Teesmouth and Cleveland Coast potential Special Protection Area (pSPA) and proposed Ramsar Site (pRamsar) Report of Consultation] and on the same date, confirmed the de-notification of parts of the Seal Sands Site of Special Scientific Interest (SSSI). This consolidated a number of different ecological designations into the SSSI at Teesmouth and Cleveland Coast<sup>1</sup>.
- 2.1.5 The change to the ecological status of the SSSI at Seal Sands, Cowpen Marsh, and Teesmouth and Cleveland Coast Special Protection Area (SPA) site and Ramsar site occurred in 2019, after the publication of the Stockton-on-Tees Landscape Character Assessment but prior to the submission of the ES Chapter 17 [APP-099].
- 2.1.6 The text within paragraph 17.4.17 of the ES Chapter 17 [APP-099] with reference to the East Billingham to Teesmouth Landscape Character Area (LCA) should be amended to state:
- “The open spaces contain significant wildlife value with a number of ecological designations including the Teesmouth and Cleveland Coast Site of Special Scientific Interest”.*
- 2.1.7 The changes to this designation do not alter the ecological characteristics present within the Billingham to Teesmouth LCA as assessed within ES Chapter 17 [APP-099].
- 2.1.8 It is judged by the Applicants that the baseline and subsequent assessment within ES Chapter 17 [APP-099] on the East Billingham to Teesmouth LCA would not differ as a result of these changes. The original assessment identified the East Billingham to Teesmouth LCA as medium sensitivity and the impact arising from the Proposed Development at all assessment stages (construction, operation, opening and

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<sup>1</sup> <https://consult.defra.gov.uk/natural-england-marine/teesmouth-and-cleveland-coast-potential-sp/>  
Accessed on 08.08.2022

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demolition) would result in a low magnitude of impact, and a minor adverse (not significant) effect.

### 3.0 VIEWPOINT 2

- 3.1.1 In Action Point 1 arising from Issue Specific Hearing 4 [EV8-006], the Examining Authority requested updated visualisations for Viewpoint 2 so that the viewpoint photography was taken from the sea front on the seaward side of The Cliff at Seaton Carew, rather than on the corner of The Green and The Cliff to provide a more representative viewpoint for receptors.
- 3.1.2 The Applicants have undertaken updated viewpoint photography and visualisations at an alternative viewpoint location, in close proximity to the original Viewpoint 2 photography within the ES Chapter 17 [APP-099]. The updated Viewpoint 2 visualisations listed below have been submitted at Deadline 6:
- Figure 17.8a: Viewpoint 2 - The Cliff Seaton Carew (Summer) (Document Ref. 6.3.77)
  - Figure 17.20: Viewpoint 2 The Cliff Seaton Carew – Massing (Document Ref. 6.3.110)
  - Figure 17.21: Viewpoint 2 The Cliff Seaton Carew – Photomontage (Document Ref. 6.3.111)
- 3.1.3 It is judged by the Applicants that the baseline and subsequent assessment within the ES Chapter 17 [APP-099] on recreational and residential receptors would not change as a result of the alternative viewpoint.
- 3.1.4 The original assessment identified the visual residential and recreational receptors at Viewpoint 2: The Cliff, Seaton Carew as high sensitivity and the impact arising from the Proposed Development at construction and demolition would result in a low magnitude of impact and a minor adverse (not significant) effect. The impact at operation and opening would result in a very low impact and a negligible adverse (not significant) effect.