

# Net Zero Teesside Project

Planning Inspectorate Reference: EN010103

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

The Net Zero Teesside Order

Document Reference: 8.12 – Statement of Common Ground with Northumbrian Water Ltd



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

Date: - August 2022 – for Deadline 5 Submission

## DOCUMENT HISTORY

<b>Document Ref</b>	8.12		
<b>Revision</b>	3.0		
<b>Author</b>	Jack Bottomley, bp		
<b>Signed</b>		<b>Date</b>	02.08.2022
<b>Approved By</b>			
<b>Signed</b>		<b>Date</b>	
<b>Document Owner</b>			

## GLOSSARY

<b>Abbreviation</b>	<b>Description</b>
AD Guidance	Guidance on associated development applications for major infrastructure projects' (April 2013)
AGI	Above Ground Installation
Applicants	Together NZT Power and NZNS Storage
Application (or DCO Application)	The application for a DCO made to the SoS under Section 37 of PA 2008 in respect of the Proposed Development, required pursuant to Section 31 of the PA 2008 because the Proposed Development is a NSIP 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 which does not generate electricity from wind, and by the Section 35 Direction
Associated Development	Defined under S.115(2) of PA 2008 as development which is associated with the principal development and that has a direct relationship with it. Associated development should either support the construction or operation of the principal development or help address its impacts. It should not be an aim in itself but should be subordinate to the principal development
BEIS	Department for Business, Energy, and Industrial Strategy
CCP	Carbon capture plant
CCGT	Combined cycle gas turbine
CCUS	Carbon capture usage and storage

CEMP	Construction and Environmental Management Plan
DCO	A Development Consent Order made by the relevant Secretary of State pursuant to the 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 EIA Regulations
EIA Regulations	Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended) setting out how the environmental assessment of NSIPs must be carried out and the procedures that must be followed
Electricity Generating Station (or CCGT / Low Carbon Electricity Generating Station)	A new electricity generating station fuelled by natural gas and with a gross output capacity of up to 860 megawatts
EPC Contractor	Engineering, Procurement and Construction contractor who will undertake the detailed engineering design, procurement and deliver the construction of the Proposed Development
ES	Environmental Statement, documenting the findings of the EIA
ExA	Examining Authority
Land Plans	The plans showing the land that is required for the Proposed Development, and the land 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 Proposed Development may be built
NSIP	Nationally Significant Infrastructure Project that must be authorised by the making of a DCO under PA 2008
NZT Power	Net Zero Teesside Power Limited
NZNS Storage	Net Zero North Sea Storage Limited
NZT	Net Zero Teesside - the name of the Proposed Development.
Open Space Land	The parts of the Order Land which are considered to be open space for the purposes of section 132 of the PA 2008 and as shown hatched blue on the Land Plans

Order	The Net Zero Teesside Order, being the DCO that would be made by the Secretary of State authorising the Proposed Development, a draft of which has been submitted as part of the Application
Order Land	The land which is required for, or is required to facilitate, or is incidental to, or is affected by, the Proposed Development and over which powers of compulsory acquisition are sought in the Order
Order Limits	The limits of the land to which the Application relates and shown on the Land Plans and Works Plans within which the Proposed Development must be carried out and which is required for its construction and operation
PA 2008	The Planning Act 2008 which is the legislation in relation to applications for NSIPs, including preapplication consultation and publicity, the examination of applications and decision making by the Secretary of State
PCC Site	Power, Capture and Compression Site - the part of the Site that will accommodate the Electricity Generating Station, along with the CCP and high-pressure compressor station
Proposed Development (or Project)	The development to which the Application relates and which requires a DCO, and as set out in Schedule 1 to the Order
Requirements	The 'requirements' at Schedule 2 to the Order that, amongst other matters, are intended to control the final details of the Proposed Development as to be constructed and to control its operation, amongst other matters to ensure that it accords with the EIA and does not result in unacceptable impacts
Site (or Proposed Development Site)	The land corresponding to the Order Limits which is required for the construction and operation of the Proposed Development
SoCG	Statement of Common Ground
Section 35 Direction	The direction under section 35 of the PA 2008 dated 17 January 2020 from the SoS that the Specified Elements together with any matters/development associated with them should be treated as development for which

	development consent under the PA 2008 is required
SoS	The Secretary of State - the decision maker for DCO applications and head of Government department. In this case the SoS for the Department for Business, Energy, and Industrial Strategy
Specified Elements	Those elements of the Proposed Development that, by virtue of the Section 35 Direction, are to be treated as development for which development consent under the PA 2008 is required being: the CO2 gathering network, including the CO2 pipeline connections from the proposed CCGT Electricity Generating Station and industrial facilities on Teesside to transport the captured CO2 (including the connections under the tidal River Tees), a high-pressure carbon dioxide compressor station to receive captured CO2 from the CO2 gathering network, and a section of the CO2 transport pipeline for the onward transport of the captured CO2 to a suitable offshore geological storage site
STDC	South Tees Development Corporation
Work No.	Work number, a component of the Proposed Development, 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 Proposed Development

---

## CONTENTS

<b>1.0</b>	<b>Introduction .....</b>	<b>1</b>
<b>2.0</b>	<b>Summary of Consultation and Discussions .....</b>	<b>4</b>
<b>3.0</b>	<b>Matters Agreed .....</b>	<b>6</b>
<b>4.0</b>	<b>Matters to be Agreed.....</b>	<b>8</b>

## TABLES

	Table 2.1: Summary of Consultation .....	4
	Table 2.2: Summary of Discussion .....	4

## 1.0 INTRODUCTION

### Overview

- 1.1.1 This Statement of Common Ground (Document Ref. 8.12) has been prepared by Net Zero Teesside Power Limited and Net Zero North Sea Storage Limited (the 'Applicants') in conjunction with Northumbrian Water Ltd ("NWL") in respect of the Net Zero Teesside Project (the 'Proposed Development').
- 1.1.2 The SoCG relates to the application (the 'Application') that has been submitted to the Secretary of State ('SoS') for Business, Energy and Industrial Strategy, under Section 37 of 'The Planning Act 2008' (the 'PA 2008'), seeking development consent for the Proposed Development. The Application was accepted for Examination by the SoS on 16<sup>th</sup> August 2021.
- 1.1.3 The SoCG sets out the matters of agreement between the Applicants and NWL and also explains those matters which, at the time of writing, remain unresolved between the parties.
- 1.1.4 The agreements to date have been reached through consultation and continuing discussions between the parties, including interface meetings and regular face to face discussions.

### Description of Proposed Development

- 1.1.5 The Proposed Development will work by capturing CO<sub>2</sub> from a new 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.
- 1.1.6 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** – natural gas supply connections and Above Ground Installations ('AGIs') (the '**Gas Connection**');
  - **Work No. 3** – an electricity grid connection (the '**Electrical Connection**');
  - **Work No. 4** – water supply connections (the '**Water Supply Connection Corridor**');
  - **Work No. 5** – wastewater 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**').

1.1.7 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 Electricity Generating Station connections and the CO<sub>2</sub> gathering network will require corridors of land within both Redcar and Stockton-on-Tees, including crossings beneath the River Tees.

#### **Northumbrian Water Ltd (NWL) Interests**

1.1.8 NWL interests are understood to be as follows:

- Land where NWL is either occupier, tenant or lessee and/or has access to for their own operations and maintenance
- Land that contains NWL apparatus required for delivery of raw and potable water
- Land that contains NWL apparatus for the collection of sanitary waste
- As a supplier of raw water and potable water to the Applicants' Proposed Development located at Teesworks
- As a wastewater treatment plant (WwTP) operator able to treat some of the Applicants' effluents should a mutually agreeable Effluent Management Contract be put in place

1.1.9 NWL apparatus is located both on the north bank of the River Tees, under the Tees and also on the south bank of the River Tees. The Applicants' DCO Order Limits include a number of these assets.

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

1.1.10 The purpose of this document is to summarise the agreements reached between the parties on matters relevant to the Examination of the Application and to assist the



---

Examining Authority ('ExA'). It also explains the matters which remain unresolved at the time of writing, but which both parties are working positively toward resolving. As such, it is expected that further iterations of the SoCG will be submitted to the ExA throughout the Examination and prior to the making of any Development Consent Order ('DCO') for the Proposed Development.

1.1.11 The SoCG has been prepared with regard to the guidance in 'Planning Act 2008: examination of application for development consent' (Department for Communities and Local Government, March 2015).

1.1.12 The SoCG is structured as follows:

- Section 2 – sets out consultation and related discussions held between the Applicants and Northumbrian Water Ltd
- Section 3 – sets out the matters discussed and agreed to date.
- Section 4 – sets out matters to be agreed and the proposed way forward.

## 2.0 SUMMARY OF CONSULTATION AND DISCUSSIONS

### Overview

2.1.1 This section provides a summary of how the Applicants have consulted NWL on the Proposed Development and also sets out the discussions that have taken place between the parties.

### Consultation

2.1.2 **Table 2.1** (below) provides a summary of how the Applicants have consulted NWL and how NWL have responded to that consultation.

**Table 2.1: Summary of Consultation**

Consultation Stage/Date	NWL Response
Stage 1 Consultation (non-statutory) – 2 <sup>nd</sup> October to 19 <sup>th</sup> November 2019	N/A
Stage 2 Consultation (statutory) – 7 <sup>th</sup> July to 18 <sup>th</sup> September 2020	N/A
Section 42 Update Consultation – 7 <sup>th</sup> December 2020 to 25 <sup>th</sup> January 2021 (further targeted consultations held 12 <sup>th</sup> February to 16 <sup>th</sup> March 2021 & 26 <sup>th</sup> March to 3 <sup>rd</sup> May 2021)	NWL mentions domestic and sanitary waste can be accepted at Bran Sands but can only take a limited supply of other effluents from the Applicants. NWL are concerned about the location of the CO2 pipelines and the proximity to NWL’s existing apparatus such as raw and potable water mains and the Bran Sands WwTP. NWL would like to be consulted on HSE aspects of the CO2 pipeline and also need full access to their own assets. NWL expects the applicants to consult NWL on the easements.
Consultation on proposed changes to DCO Application – 10 <sup>th</sup> March to 14 <sup>th</sup> April 2022	N/A

### Discussions

2.1.3 A summary of the detailed discussions that have taken place between the parties is set out in the table below. Where appropriate, email follow-up has taken place to provide each party with information to support the progression of discussions.

**Table 2.2: Summary of Discussion**

Meeting Date	Meeting Type	Topics Discussed
Feb 2020	Data gathering – Bran Sands WwTP	General Proposed Development background plus water needs and effluent treatment needs for NZT. Information

		requested from NWL to support the Applicants in the early phase of the Proposed Development.
Jan 2021	Introductions	Proposed Development update, water resources and planning
Jan 2021	Follow-up	NZT follow-up on water supply and treatment of effluent. Action log prepared
June 2021	Technical on-site	Treatability trials scoping and timing, potential tie-in points
July 2021	Treatability KO	Treatability trial kick off meeting
Oct 2021	Follow-up	Treatability results updates
Dec 2021- Mar 2022	Regular updates	Further testing, initial HOTs, initial commercial discussions
Mar 2022	Pre-Consultation	Proposed changes to DCO and Relevant Representation
April 2022	Interface meeting	Treatment trials, DCO update
May -July 2022	Fortnightly interface meetings	Wastewater treatment, water supply, DCO progress

## **3.0 MATTERS AGREED**

### **Overview**

3.1.1 This section sets out the matters agreed between the parties.

### **3.1.2 Principle of the Proposed Development**

There is an urgent need for the Proposed Development, relating both to the provision of low carbon electricity and the need to provide for the collection, compression and transport of carbon dioxide from a range of emitters in the Teesside area.

### **3.1.3 Protective Provisions**

The parties are progressing protective provisions. Whilst not yet in agreed form, the parties have agreed to base the provisions on NWL's preferred bespoke provisions, and expect agreement to be reached during the Examination. The parties' expectation is that the protective provisions and any side agreement will provide the appropriate protection to NWL's apparatus and operations.

### **3.1.4 NWL Existing Apparatus**

Both the Applicants and NWL have agreed to continue engagement during the design of the Proposed Development in order to minimise and/or mitigate the impact it will have on NWL existing apparatus.

The Applicants and their nominated contractor are in active discussions with NWL and as part of these discussions will request as-built data of NWL existing apparatus. This data will be used to design the routing and construction methodology of all physical interactions between NWL apparatus and the Proposed Development.

### **3.1.5 Wastewater Treatment**

The Environmental Statement (Document Ref 6.2) outlined two options for treatment of wastewater produced by the Proposed Development. One option is to utilise the Bran Sands WwTP via commercial agreement with NWL.

In 2021 the Applicants engaged with NWL to undertake treatment trials of the potential effluent stream from the carbon capture plant. A treatment trial was carried out by NWL under a Purchase Order from the Applicants, using a synthetic sample of the effluent stream. The trial was completed in three stages to allow NWL to determine the feasibility of the Bran Sands WwTP treating the effluent and the limits of the system.

The Applicants are continuing to work with NWL on a technical and commercial basis prior to making the final selection on wastewater treatment.

### **3.1.6 Raw & Potable Water**

The Applicants and NWL have been in discussion on raw and potable water demand for the Proposed Development. In June 2022, the Applicants provided NWL with conservative raw and potable water volumes for construction and operation of the Proposed Development. In July 2022, NWL confirmed that following network analysis

---

the conservative estimated water volumes are within NWL's available capacity, although investigations into the required infrastructure are continuing to confirm if additional investment is required. NWL can therefore support the Proposed Development.

---

## 4.0 MATTERS TO BE AGREED

### Overview

4.1.1 This section sets out matters to be agreed between the parties and the proposed way forward.

### 4.1.2 Protective Provisions

The Applicant is in discussion with NWL on protective provisions but they are not yet agreed. NWL provided a response to the Applicant on the latest draft protective provisions in June 2022.

### 4.1.3 Land where NWL is either occupier, tenant or lessee and/or has access to for their own operations and maintenance

NWL continues to assess whether any of its own operations maintenance requirements, including access to the Brands Sands WwTW, are unduly impacted by the Proposed Development and discussions are continuing in this regard with the Applicants.

### 4.1.4 Wastewater Treatment

The Applicant and NWL are continuing to engage on the option for wastewater treatment at the Bran Sands WwTP but the final selection has not been made. Discussions have been continuing between the Applicants and NWL since the submission of the first draft SoCG, and NWL has been commissioned by the Applicant to undertake treatment trials relating to the volume and composition of wastewater to be treated. The treatment trials have now concluded and the final report has recently been produced. This concludes that there are no significant issues posed with processing the waste stream. (the results are based solely on the simulated waste water sample provided to NWL in 2021).

Again, discussions are continuing between the Applicants and NWL as to volume, but Marske-by-the-sea STW may be capable of treating the domestic foul water discharges arising during the construction and operation of the Proposed Development. The Applicants shared conservative foul water volumes for construction and operation with NWL in July 2022. NWL will assess these volumes against available capacity at Marske-by-the-Sea STW, however both parties currently understand that the volumes are

### 4.1.5 Raw & Potable Water

The Applicants have provided NWL with conservative water volumes for the periods of construction and operation. The Applicants will continue to engage with NWL and share updated water volumes during design development. Decommissioning volumes are not available at this stage but it has been confirmed that they would be lower than operational water demand and therefore water supply would not present an issue.