Net Zero Teesside

Net Zero Teesside Project

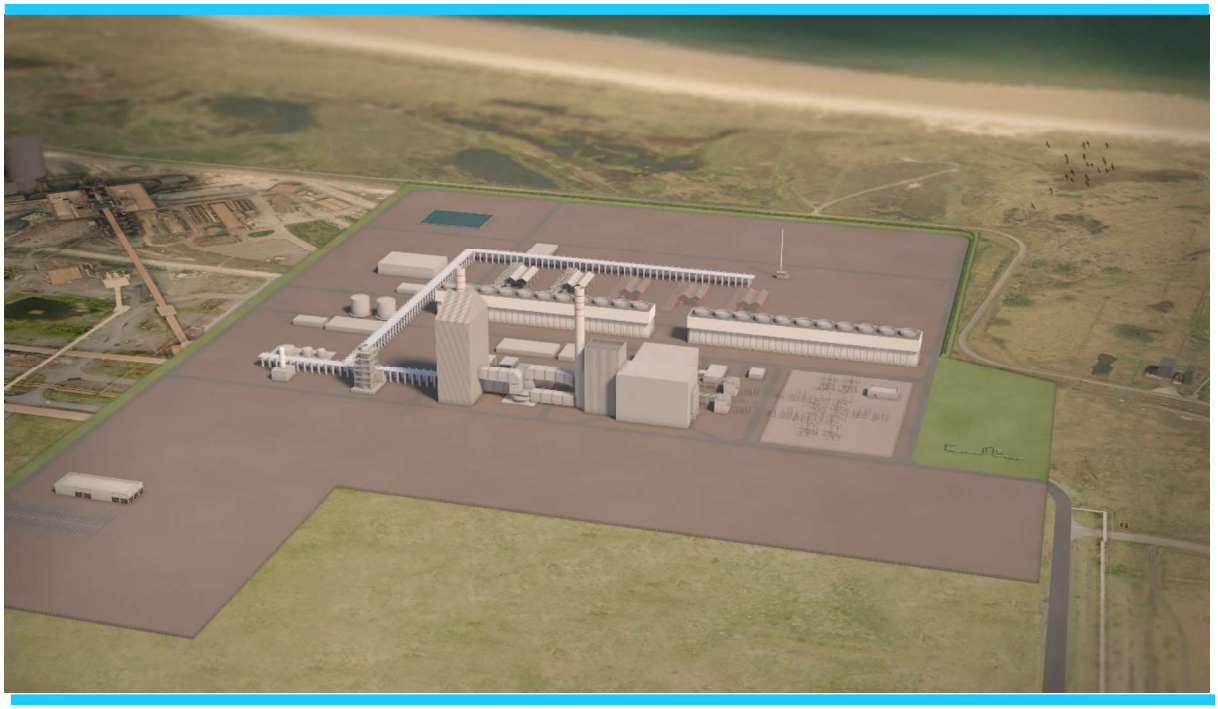
Planning Inspectorate Reference: EN010103

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: 8.5 – Statement of Common Ground with Environment Agency

The Planning Act 2008
Environment Agency agreement reference ENVPAC/1/NEA/00043 (April 2019), ENVPAC/1/NEA/00085 (January 2021) and May 2021



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

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DOCUMENT HISTORY

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GLOSSARY

Abbreviation	Description
AD Guidance	Guidance on associated development applications for major infrastructure projects' (April 2013)
AEL	Associated emission levels
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
BAT	Best Available Technology
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

Abbreviation	Description
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

Abbreviation	Description
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
RAS	Radioactive Substances
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
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

Abbreviation	Description
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
WFD	Water Framework Directive
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

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INTRODUCTION

Overview

This Statement of Common Ground ('SoCG') (Document Ref. 8.5) has been prepared by Net Zero Teesside Power Limited and Net Zero North Sea Storage Limited (the 'Applicants') in conjunction with the Environment Agency (EA) in respect of the Net Zero Teesside Project (the 'Proposed Development').

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 16th August 2021.

The SoCG sets out the matters of agreement between the Applicants and the Environment Agency and also explains those matters which, at the time of writing, remain unresolved between the parties.

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

The Proposed Development will work by capturing CO_2 from a new gas-fired power station in addition to a cluster of local industries on Teesside and transporting it via a CO_2 transport pipeline to the Endurance saline aquifer under the North Sea. The Proposed Development will initially capture and transport up to 4Mt of CO_2 per annum, although the CO_2 transport pipeline has the capacity to accommodate up to 10Mt of CO_2 per annum thereby allowing for future expansion.

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 connection 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_2 gathering network (including connections under the tidal River Tees) to collect and transport the captured CO_2 from industrial emitters (the industrial emitters using the gathering network will be responsible for consenting their own carbon capture plant) (the **'CO_2 Gathering Network Corridor'**);

Work No. 7 – a high-pressure CO_2 compressor station to receive and compress the captured CO_2 from the Low Carbon Electricity Generating Station and the CO_2 Gathering Network before it is transported offshore (the **'HP Compressor Station'**);

Work No. 8 – a dense phase CO_2 export pipeline for the onward transport of the captured and compressed CO_2 to the Endurance saline aquifer under the North Sea (the **'CO_2 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'**).

The electricity generating station, its post-combustion carbon capture plant and the CO_2 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_2 export pipeline will also start in this location before heading offshore. The generating station connections and the CO_2 gathering network will require corridors of land within both Redcar and Stockton-on-Tees, including crossings beneath the River Tees.

The Role of the Environment Agency

The Environment Agency is a non-departmental public body, the purpose of which is 'to protect or enhance the environment taken as a whole', so as to contribute to 'the objective of achieving sustainable development' (Environment Act, 1995).

The Environment Agency is a statutory consultee in respect of all DCO applications that are likely to affect land in England. Annex D of Advice Note 11 'Working with Public Bodies' produced by the PINS sets out in detail the role of the Environment Agency in the DCO process, including the level of input and agreement that might be expected from the Environment Agency.

The Environment Agency's role covers various topics including:

- managing the risk of flooding from main rivers, reservoirs and the sea;
- regulating major industry and waste;
- treatment of contaminated land;
- water quality and resources;
- fisheries;
- inland river, estuary and harbour navigation; and
- conservation and ecology of the aquatic environment.

The Environment Agency also has a role as the regulator for the Environmental Permitting regime and is responsible for granting, regulating and enforcing Environmental Permitting requirements for any installation that requires an environmental permit under the Environmental Permitting (England and Wales) Regulations 2016 (as amended).

The Environment Agency is a competent authority for the purposes of the Habitats Regulations when determining applications for permits, consents and licences for which it is the regulatory authority. Where a NSIP has the potential to have a significant effect on European sites and a permit, consent or licence is also required, the Environment Agency (in addition to the competent authority under the Planning Act) will be required to assess the likelihood and scale of these effects and if necessary to then carry out appropriate assessment (and consult the relevant nature conservation body) before making a decision under the relevant legislation.

The Purpose and Structure of this Document

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.

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).

The SoCG is structured as follows:

Section 2 – sets out consultation and related discussions held between the Applicants and the Environment Agency.

Section 3 – sets out the matters discussed and agreed to date.

Section 4 – sets out matters to be agreed and the proposed way forward.

SUMMARY OF CONSULTATION AND DISCUSSIONS

Overview

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

Consultation has been ongoing with the EA since the scoping stage for the Proposed Development (February 2019). A summary of all consultation comments received to date for the Proposed Development is presented in **Table 2.1** below.

Table 2.1: Summary of Consultation and Discussion

Date	Details
February 2019 (EIA Scoping)	The Environment Agency were consulted on the EIA Scoping Report prepared by the Applicants in February 2019. Responding to this formal consultation, under response reference 'NA/2019/114466/01-L01', the Environment Agency provided a range of technical feedback to help inform the DCO application. This included advice in relation to climate change, flood risk, carbon capture readiness, water quality, fisheries, contamination and environmental permitting.
May 2019 (Technical engagement meeting)	A meeting was held with the Environment Agency during which a range of technical topics were discussed. This included progress in defining the scope and operation of the CCUS project and identification of potential CO_2 sources to be captured. Issues arising from Scoping discussed were: Climate change allowances for flood risk assessment Carbon Capture Readiness EU Emissions Trading System implications Hazardous Substances Consent/COMAH Water abstraction Net Gain Designated sites and habitats and potentially affected species. Mitigation including piling restrictions. Discharges and outfalls. Environmental Permitting - including the need to consider how the Proposed Development will interface with the Environment Agency in terms of Best Available Techniques (BAT), especially on the basis that the Proposed Development is a 'first of a kind'. Determination of BAT was

Date	Details
	considered in detail during the meeting, including in relation to themes of power generation, cooling, visible plume impacts, emissions to air and the emerging BAT position for CCS plants, covering aspects such as carbon capture rate, parasitic load, CO_2 pressures/venting and use of an amine based solvent. During the meeting, key points from the Environment Agency EIA scoping consultation response were also reviewed and key next-steps agreed.
March 2020 (Technical engagement meeting)	A meeting was held with the Environment Agency to provide an update on the Proposed Development ahead of the planned Stage 2 consultation. The focus of the meeting was fourfold; (1) to re-familiarise the Environment Agency with the scheme; (2) to provide a high-level update on core themes; (3) to introduce technical approaches to some key assessments ahead of PEI consultation and; (4) to provide an opportunity for comment / suggestions. During the meeting, the thermal effluent modelling scope and approach was presented to the Environment Agency; the intended approach to the assessment of any chemical effects arising from the Proposed Development's treated wastewater outfall was also presented.
March 2020 (Circulation of technical memo – consultation on modelling scope and approach)	Following the engagement meeting with the Environment Agency, it was specifically consulted on the scope of thermal effluent modelling proposed to support the assessment of effects arising from the operation of the Proposed Development. Feedback on the modelling scope and approach, including the use of nearfield modelling software (Cormix), was provided by the EA.
July 2020 (Stage 2 consultation – Preliminary Environmental Information (PEI) Report)	The Environment Agency was consulted in accordance with Section 42 of the PA 2008 and provided with a copy of the PEI Report prepared by the Applicants. Responding to this formal consultation, under response reference 'NA/2020/115096/01-L01', the Environment Agency provided a range of technical feedback to help inform the finalisation of the EIA and the overall DCO application. Detailed comments were provided on the PEI Report and this included: Groundwater resources, primarily within the Sherwood Sandstone Installations and permits including Radioactive Substances (RAS) permit, medium combustion plant permit for diesel generators if used during construction. Carbon Capture Readiness Requirements Details of the off-shore elements of the scheme

Date	Details
	Contaminated Land – including treatment and re-use on-site under a permit Emissions to air and environmental permitting Coastal modelling including suggested refinements to the nearfield modelling. Water environment and the Water Framework Directive (WFD) Water dependent species and habitats Biosecurity (Invasive non-native species) Marine ecology Climate change Major accidents Cumulative effects
January 2021 (Technical engagement meeting)	A meeting was held with the Environment Agency to provide an update on the Proposed Development and discuss technical feedback provided during Stage 2 consultation. A number of aspects were presented to the Environment Agency, including the formation of the Northern Endurance Partnership and refinements to the red line boundary for the Proposed Development. The preliminary findings from hydrological surveys carried out along Coatham Sands were presented to the Environment Agency and the position set out that no further surveys were proposed. A location for a potential replacement outfall for disposal of treated effluent was discussed ; this included consideration of key themes such as thermal effluent modelling, benthic and intertidal characterisation and potential effects on fisheries. The technical feedback provided on nearfield modelling was systematically discussed with Environment Agency modelling specialists and appropriate next-steps agreed; the Environment Agency raised the likely requirement for far-field modelling.
March 2021 (Environmental Permitting strategy and associated application(s))	A meeting was held with the EA to discuss: HP Compressor and whether this should be a Directly Associated Activity Dispersion modelling of emissions to air of amines NOx BAT-AELs and the application of the CCGT Energy Efficiency Correction Factor Cooling BAT Assessment

Date	Details
March 2021 (Technical meeting ahead of DCO submission).	A meeting was held with the Environment Agency to confirm responses to feedback received and provide an opportunity for final discussion ahead of DCO submission. Meeting included discussion of: Status of Technical Engagement Air Quality Contaminated land and ground conditions Surface water including thermal modelling
July 2021 (Technical Meeting ahead of DCO submission)	Meeting held with the Environment Agency to discuss the results of the thermal modelling following receipt of EA comments on Coastal Modelling Report (Appendix 14E, Document Ref 6.4.33 [**APP-321**]). Written response to EA comments sent in November 2021 with a commitment to revisit Coastal Modelling and produce updated Report following selection of outfall option during pre-examination period.
December 2021 (Publication of EA's Relevant Representation at start of pre-examination phase)	Following submission of the DCO Application in 19th July 2021 and being accepted for examination on 16th August 2021, the Relevant Representations of all Interested Parties including the EA were published on 22nd December 2021. Meetings to discuss the EA's Relevant Representation was held on 1st April 2022 (focussed on surface water - including the Tees Bay WFD body) and 11th April 2022 (focussed on contaminated land).
March 2022 (meeting to discuss Relevant Representation – Environmental Permit)	It was agreed that an environmental permit application for a Directly Associated Activity will be submitted for the HP Compressor site. The EA raised question of methane venting from the HRSG stack on start-up and shut-down. Discussion held on wastewater treatment and on modelling of amine releases to air including a worked example of an assessment to which the EA provided some feedback. An approach for how to correct ELVs for normalisation with CO_2 abatement was also provided by the Applicants to the EA.
1st April 2022 (second meeting to discuss Relevant Representation)	Meeting to discuss relevant representation which included marine and terrestrial ecology.
11th April 2022 (third meeting to discuss Relevant Representation)	Meeting to discuss relevant representations regarding contaminated land and groundwater issues.
May 2022	Email exchange with the EA, where the Applicants was informed that the EA would not be able to provide comments on this draft of the SOCG until Deadline 2.

Date	Details
July 2022 (email exchange)	In advance of a meeting held on 7 July 2022, the EA confirmed that phytoplankton surveys were not necessary for the Proposed Development.
July 2022 (meeting to discuss draft of discharge modelling report and general discharge modelling parameters)	Meeting held with EA to discuss the discharge modelling which have been completed and what further refinements are required in advance of the cumulative effects assessment being completed.
July 2022 (contaminated land meeting)	Meeting held to discuss the EAs comments on the ground investigation report and general approach to contaminated land remediation within the application and the road map to resolve outstanding issues within the examination timeframe.
July 2022 (email exchange)	In response to an email from the Applicants, the EA have confirmed the carbon capture rate required for the Proposed Development.
August 2022 (email exchange)	Email exchange to discuss the contents of the SOCG in advance of deadline 6.
September 2022 (email exchange)	The Applicant has requested a meeting with the EA to discuss nutrient modelling updates and further changes to the SOCG.
October 2022 (contaminated land meeting)	The EA requested a meeting with the Applicant regarding contaminated land issues and the applicant also discussed the comments made by the EA at Deadline 8.
October 2022 (Requirements meeting)	A meeting was held between the EA and the Applicants regarding Requirement 13 and some information regarding Requirement 31.
October 2022 (WFD meeting)	A meeting was held between the EA and the Applicants to discuss the Water Framework Directive Assessment and the updated Discharge Modelling
October 2022 (email exchange)	Further refinements to Requirement 13 have been approved by the EA and will be produced in full in the D12 draft submission. The Applicant shared a copy of the agreed Requirement 13 on 26 October 2022.
November 2022 (WFD meeting)	A meeting was held between the EA and the Applicants to discuss the updated findings of the WFD assessment and to coordinate response to the Rule 17 letter [PD-022]
November 2022 (SOCG meeting)	A meeting was held to discuss the final positions presented in the WFD.

MATTERS AGREED

Overview

This section sets out the matters agreed between the parties.

Table 3.1 – List of Matters Agreed between the Applicants and the Environment Agency

Matter Agreed	Commentary
Consultation	A summary of pre-application consultation is contained in the Consultation Report (Document Ref. 5.1 [**APP-068**]. It is agreed that the consultation summary in Section 3 of this SoCG provides an accurate record of consultation with the Environment Agency on application matters to date.
Adequacy of the Environmental Statement and other relevant documents associated with the DCO application	It is agreed that the Environment Agency have been involved throughout the pre-application period to help inform the EIA. It is agreed that the methods used to inform the assessment of effects upon air quality, water resources, water quality, flood risk, contaminated land and hydrogeology are appropriate and in line with current best practice and guidance.
Draft Development Consent Order	**Draft DCO – Work No. 1** The Applicants have amended the drafting of Work No. 1 to include references to include water washing and/or acid washing facilities between the carbon dioxide absorption column and its associated stack. **Draft DCO – Requirement 13** Further discussion between the EA and the Applicants agreed with wording of Requirement 13 to be submitted as part of the DCO to be submitted at Deadline 12. **Draft DCO – Requirement 16** The Applicants have amended the wording of requirement 16 in line with the requests for updates made by the EA at Deadline 7 and updated the CEMP and updated Commitments Register. **Draft DCO – Requirement 31** The Applicants provided further explanation for the wording in relation of Requirement 31. **Draft DCO – Description of Work No. 7** The Applicants confirms that the proposed storage of hydrogen is included within Work No. 1C(v) (“ancillary equipment, including pumps, chemical storage and pipework”). **Draft DCO – Requirement 37 Effluent nutrient nitrogen safeguarding scheme** **Requirement 37 has been updated to state the following:** 37.—(1) No part of the authorised development other than the permitted preliminary works may commence until an effluent nutrient nitrogen safeguarding scheme has been submitted to and, after consultation with Natural England and the Environment Agency, approved by the relevant planning authority.

Matter Agreed	Commentary
	(2) The effluent nutrient nitrogen safeguarding scheme submitted pursuant to paragraph (1) must include the following— (a) details of the selected design and discharge location of the infrastructure that will treat and discharge effluent containing nitrogen produced by the operation of the authorised development; (b) discharge modelling of the design selected pursuant to sub-paragraph (a) and which (unless otherwise agreed with the relevant planning authority after consultation with Natural England and the Environment Agency) is based on the modelling methodology in Appendix B of the nutrient nitrogen briefing paper; and (c) information on the wastewater discharge monitoring methods, frequency and locations that will be undertaken pursuant to any environmental permits required for the authorised development; and (d) provision for monitoring information which is provided to the Environment Agency pursuant to the environmental permit to also be provided to the relevant planning authority and Natural England. (3) The effluent nutrient nitrogen safeguarding scheme submitted pursuant to paragraph (1) must demonstrate that nitrogen in effluent from the operation of the authorised development is controlled and discharged in order that the nitrogen in effluent will— (a) not cause a net increase in total nitrogen load in water within the Tees Estuary at the Seal Sands mud flats; and (b) not cause a deterioration of, nor jeopardise attainment of, the overall Water Framework Directive waterbody classifications or individual elements of those overall classifications of the Tees Coastal Waterbody and the Tees Transitional Waterbody; and (c) contribute to achieving Water Framework Directive protected area objectives relevant to the Tees Coastal Waterbody and the Tees Transitional Waterbody.. (4) The undertaker must implement the effluent nutrient nitrogen safeguarding scheme as approved, unless otherwise agreed with the relevant planning authority following consultation with Natural England and the Environment Agency.

Matter Agreed	Commentary
Protective Provisions	It is agreed that no protective provisions are required for the Environment Agency since the Proposed Development will not affect any Environment Agency owned or operated infrastructure.
Air Quality and Environmental Permitting	The approach to permitting, as set out in I Chapter 8: Air Quality of the draft ES (ES Volume I, Document Ref. 6.2.8 [**APP-090**]) is agreed. Engagement has also been undertaken with the Environment Agency over the definition of best available techniques (BAT) for carbon capture operations. The Environment Agency's Air Quality Modelling and Assessment Unit (AQMAU) has also been consulted over the application of the Atmospheric Dispersion Modelling System (ADMS) amines chemistry module. The Environment Agency has provided a guidance note on the approach to assessment of amine and N-amine emissions and this has been applied to the air quality assessment. The Environmental Permit application was submitted to the Environment Agency in October 2021 and was Duly Made on 30th June 2022. The permit application included an appraisal of BAT and air impacts based on the design understanding at that time. It is agreed by both Parties that a subsequent permit variation may be required following completion of the detailed design to be specific to the solvent and licensor design to be applied and provide further detail on plant commissioning and start-up and air and water discharges as appropriate.
Biodiversity including effect on water habitat	Chapters 12 to 15 (Terrestrial, Aquatic and Marine Ecology and Ornithology) of ES Volume I (Document Refs. 6.2.12 to 6.2.15 [**APP-094 to APP-097**]) include assessments of the potential effects of the Proposed Development on ecology and are supported by Technical Appendices 12C-J, 13A, 14A-E and 15A-B of ES Volume III (Document Refs 6.4.20-6.4.35 [**APP-300 to APP-326**]) and accompanying Figures 13-1 to 15-4 (Document Refs. 6.3.58 to 6.3.63 [**APP-166 to APP-171**). It is agreed between the Parties that the relevant ecological aspects of the Proposed Development that fall within the remit of the Environment Agency have been adequately addressed. The Parties agree that the development design and impact avoidance measures outlined as embedded mitigation in Chapters 12 to 15 (Terrestrial, Aquatic and Marine Ecology and Ornithology) of ES Volume I (Document Refs. 6.2.12 to 6.2.15 [**APP-094 to APP-097**]) are appropriate and that mitigation measures that would be necessary to ensure compliance with legislation relating to those protected species that fall within the remit of the Environment Agency are included. It is further agreed that the specified control measures within the Framework Construction Environmental Management Plan (CEMP) (Appendix 5A, Document Ref 6.4.5 [**REP5-014**]) (the implementation of which is secured by Requirement 16 of the

Matter Agreed	Commentary
	draft DCO (Document Ref. 2.1 [**REP5-002**]), and the proposed protected species surveys secured via Requirement 15, are appropriate for the control of potential effects on protected species during construction of the Proposed Development. In accordance with Requirement 15, where a protected species is shown to be present, no authorised development of that part must commence until a scheme of protection and mitigation measures have been submitted to and approved by the relevant planning authority. It is agreed that biodiversity enhancement measures will be adopted within the Proposed Development design as set out in the indicative Landscape and Biodiversity Strategy (Document Ref. 5.12 [**REP5-011**]). The Environment Agency defers to Natural England on all other biodiversity matters relating to this Application. The Parties agree that this is suitably secured via existing Requirements of the DCO including Requirement 4(4) which requires a landscaping and biodiversity management and enhancement plan to be submitted to and approved by the relevant planning authority and Requirement 4(7) which requires that this plan must be in accordance with the principles of the indicative Landscape and Biodiversity Strategy submitted (Document Ref. 5.12 [**REP5-011**]). It is agreed that Natural England, as the statutory nature conservation body, take the 'lead' role in the agreement of the HRA, rather than the EA, building upon the prior engagement and agreement reached during the pre-application period. The results of the water vole and otter surveys completed in Spring 2022 have been submitted into the examination as the Riparian Mammal Report [**REP5-029**].
Impact of HDD crossing of the Tees on marine ecology receptors	The HDD crossing of the River Tees was removed from the Order Limits at Deadline 6 (see Second Change ES Addendum (Document Ref 7.11 [**REP6-107**])
Hydrology and water resources including compliance with the Water Framework Directive (WFD)	The Environment Agency provided advice on the scope of the WFD assessment during the pre-Application stage. An assessment has been undertaken which considers the potential effects of the Proposed Development on the water environment. This was presented in Chapter 9: Surface Water, Flood Risk and Water Resources (Document Ref. 6.2.9 [**APP-091**]) supported by an assessment of the potential impacts on the WFD status of water bodies that may be affected by the Proposed Development detailed in Appendix 9C: Water Framework Directive Assessment (ES Volume III, Document Ref. 6.4.11 [**APP-254**]). It is agreed that the approach used within the WFD assessment is satisfactory and that this uses the most up to date data available from the Environment Agency at the date of DCO submission (July 2021).

Matter Agreed	Commentary
	It is agreed between the Parties that, with the exception of the issues set out Section 4.0 below, these documents provide a satisfactory assessment of all relevant potential pollution risks to surface water and groundwater bodies during construction and operation of the Proposed Development and that the design and impact avoidance and mitigation measures identified and specified by control measures within Requirements 3(2) and 3(6) (Detailed Design), and Requirement 11 (Surface and Foul Water Drainage) of the draft DCO (Document Ref. 2.1 [**REP6-002**]) are appropriate. It is further agreed that the controls during construction are adequately secured via the Framework Construction Environmental Management Plan (CEMP) (Document Ref. 6.4.5 [**REP5-013**]). The final CEMP will be submitted for approval by the local planning authority in consultation with the Environment Agency as secured in draft Requirement 16.
Flood risk	The PCC Site and electrical and gas connection corridors lie within Flood Zone 1 whilst the proposed CO_2 gathering network south of the Tees is located within Flood Zone 1 to the east of Bran Sands WwTW and in Flood Zones 2 and 3 along the Dabholm Gut. North of the Tees the gathering network is either within Flood Zone 1 in Seal Sands and Haverton Hill or defended Flood Zone 3 (with a small area in Flood Zone 2) in Saltholme. The Parties agree that the Flood Risk Assessment (FRA) (ES Volume III, Appendix 9A, Document Ref. 6.4.9 [**APP-250** to **APP-252**]) adequately assesses potential flood risks, including satisfying the sequential and exception tests, and demonstrates that the proposed mitigation measures are adequate to mitigate flood risk. The flood risk assessment also adequately assesses the proposed evacuation plans for the operational PCC site and the draft DCO [REP5-002] seeks powers to secure emergency access to South Gare Road. It is also agreed that the FRA is based on the appropriate assumptions and data including climate change projections. The Parties agree that the FRA demonstrates that there would be no on or off-site impacts as a result of the Proposed Development in relation to residual flood risk.
Water quality in Tees Bay/Tees Coastal Waterbody	Cooling water and treated process water will be discharged to Tees Bay, as outlined in Chapter 4: The Proposed Development (ES Volume I, Document Ref. 6.2.4 [**APP-086**]) and the impacts of this on Water Framework Directive (WFD) bodies (i.e. the Tees transitional water body) have been assessed and considered further through effluent dispersion modelling. In response to the Environment Agency's Relevant Representation [RR-024], a mass balance water quality appraisal for the Tees Coastal WFD waterbody has been undertaken and this was presented to the Environment Agency on the 1st April 2022. The assessment presented confirmed that there was no significant

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	effect resulting from atmospheric nutrient nitrogen deposition from operational air emissions into the Tees Coastal WFD Waterbody and the Teesmouth and Cleveland Coast SPA/Ramsar and no further water quality modelling of this issue is considered necessary.
Water quality in the Tees Bay during construction	As explained by the Applicants in the meeting of the 1st April 2022 it is agreed that while the ES identifies a potential slight adverse effect on water quality in Tees Bay from the breakout of inert drilling fluid used in trenchless drilling during construction works, this is precautionary and not considered significant. In addition any such effect would be minimised through the adoption of measures through the Final CEMP, the approval of which the EA will be a consultee. As the effects are not significant and of a temporary nature and as the detailed measures will be secured through the CEMP, this issue has adequately addressed and appropriately controlled and mitigated.
Land Contamination and Groundwater	The Application includes a Phase I Desk Based Assessment in Appendix 10A of ES Volume III (Document Ref. 6.4.12 [**APP-255 to APP-292**]). It is agreed that the Applicants' approach to assessing land contamination is aligned with the Environment Agency's Land Contamination: Risk Management (LCRM) guidance and uses a tiered, risk-based approach drawn together by Chapter 10 of ES Volume I (Document Ref. 6.2.10 [**APP-092**]). It is agreed between the Parties that, with the exception of the issues set out Section 4.0 below, the ES provides a satisfactory assessment of the potential pollution risks to surface water and groundwater during construction and operation of the Proposed Development and that the impact avoidance and mitigation measures identified and specified by control measures within Requirement 13 (Contaminated land and groundwater) of the draft DCO (Document Ref. 2.1 [**APP-005**]) are appropriate. The Parties agree that controls on the method of piled foundations secured by Requirement 23 in the draft DCO (Document Ref. 2.1 [**APP-005**]) are appropriate in relation to protection of controlled waters. The Parties agree that ground investigations for the connections corridors will be undertaken prior to construction as necessary, i.e. if trenchless operations or intrusive ground works are proposed and secured by requirement. The Parties also agree that an assessment of groundwater flooding risk will be undertaken in advance of any intrusive works in Saltholme and secured by requirement. The EA agrees that the Hydrogeological Impact Assessment submitted by the Applicants [**REP4-027**] is acceptable for the purposes of the DCO examination. The Applicants agree that the requirement to update the HIA as a live document following the

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	completion of current and future ground investigations will be integrated into the framework CEMP for update in advance of the production of the Final CEMP. The EA have confirmed that contaminated land risks present on the site of the Proposed Development should be controllable by Requirements 13, 16 and 23 of the Draft DCO and the Applicants have provided a timeline for contaminated land management prior to and during construction, during operations and following decommissioning at Deadline 6 [**REP6-124**]. The Environment Agency provided comments on the timeline at Deadline 7 [**REP7-012**]. The Applicants provided an updated timeline at Deadline 8 (Document reference. 9.35) Submitted at Deadline 8
Combined heat and power (CHP)	A Combined Heat and Power Assessment is included as Document Ref. 5.6 [**APP-073**]. It is agreed that this adequately demonstrates the 'CHP-Ready' status of the Proposed Development. It is also agreed that Requirement 26 (Combined heat and power) of the draft DCO (Document Ref. 2.1 [**APP-005**]) adequately ensures that space and routes have been secured for the later provision of CHP during the operational life of the Proposed Development (should CHP become commercially viable in the future).
Carbon capture Readiness	A Carbon Capture Readiness Assessment is included as Document Ref. 5.7 [**APP-074**]. It is agreed that this adequately explains the carbon capture related infrastructure proposed and demonstrates that the Applicants has set aside enough land to accommodate the carbon capture plant within Work No. 1C. The EA has confirmed the Environmental Permit will require that the capture plant achieves the current BAT position of a capture rate of CO_2 of at least 95%. The EA have confirmed both the Environmental Permit and the UK Emissions Trading Scheme Monitoring, Reporting & Verification will be used to verify carbon capture performance.
Construction Environmental Management Plan and Waste Management	It is agreed that the mitigation and management measures outlined within the Framework Construction Environmental Management Plan (CEMP) (Document Ref 6.4.5 [**APP-246**]) includes the necessary principal controls to adequately manage environmental risks associated with the construction of the Proposed Development including but not limited to pollution control measures and waste management. It is also agreed that draft Requirement 16 (Construction environmental management plan) of the draft DCO (Document Ref. 2.1 [**APP-005**]) which secures the preparation and agreement of a final CEMP prior to construction of the Proposed Development is appropriate for controlling the environmental effects of construction.
Phytoplankton	The EA confirms that the requirement for phytoplankton surveys identified in its Relevant Representation [RR-024] was incorrect and that these surveys are not therefore required.
Technical Feasibility of installing the	At the Environment Agency's request, the Applicants provided the following information to supplement the submitted Carbon

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Carbon Capture Plant	Capture Readiness report [APP-074] to demonstrate that there are no foreseeable barriers to the technical feasibility of installing the Applicants' chosen carbon capture plant: i) an annotated site plan, identifying key plant items such as absorbers, CO_2 compression and dehydration area, amine storage and cooling towers; ii) Details of space requirements for the following: - CO_2 capture equipment, including any flue gas pre-treatment and CO_2 drying and compression; - routeing flue gas duct to the CO_2 capture equipment; - Steam turbine island additions and modifications (e.g. space in steam turbine building for routing large low pressure steam pipe to amine scrubber unit); - Extension and addition of balance of plant systems to cater for the additional requirements of the capture equipment; - Additional vehicle movement (amine transport etc); - Space allocation for storage and handling of amines and handling of CO_2 including space for infrastructure to transport CO_2 to the plant boundary and an explanation of how the space allocations have been determined; and - the size of the footprint of the cooling towers (clearly labelled on the annotated site plan).
Nutrient Nitrogen and WFD compliance	Both parties are confident that a potential design solution for the treatment and discharge of wastewater to Tees Bay can be developed and implemented for the Proposed Development to achieve WFD compliance in the Tees Coastal, Tees Transitional and Tees Estuary waterbodies both for current and future status and that the detail of the solution is adequately secured through draft Requirement 37 of the Draft DCO. The Applicants agree that under the discharge of Requirement 37, an updated WFD assessment based on the detailed design of the Proposed Development will be prepared and consulted on with the EA. Under Requirement 37, the Applicants commit to not cause a deterioration of, nor jeopardise attainment of, the overall Water Framework Directive waterbody classifications or individual elements of those overall classifications of the Tees Coastal Waterbody and the Tees Transitional Waterbody; and to contribute to achieving Water Framework Directive protected area objectives relevant to the Tees Coastal Waterbody and the Tees Transitional Waterbody.

MATTERS TO BE AGREED

Overview

There are no outstanding matters to be agreed between the Applicant and the EA.

LUCY MO SIGNED ELECTRONICALLY

[redacted]

Signed: Lucy Mo
On behalf of: Environment Agency
Date: 07/11/2022

[redacted]

Signed: Ian Campbell
SoCG Author.
Date: 07/11/2022

[redacted]

Signed: Paul Edwards
On behalf of: NZT Power Ltd. and NZNS Storage Ltd.
Date: 07/11/2022