

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: 9.10 Applicants' Comments on Deadline 1 Submissions](#)

Planning Act 2008



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
AOD	Above ordnance datum
AS-	Additional Submissions
ASI	Accompanied Site Inspection
BAT	Best Available Techniques
BEIS	The Department for Business, Energy and Industrial Strategy
CCGT	Combined Cycle Gas Turbine
CCUS	Carbon Capture, Utilisation and Storage
CEMP	Construction and Environmental Management Plan
CTMP	Construction Traffic Management Plan
CO ₂	Carbon dioxide
CPO	Compulsory Purchase Order
dB	Decibels
DCO	Development Consent Order
dDCO	Draft Development Consent Order
EIA	Environmental Impact Assessment
EPC	Engineering, Procurement and Construction
ES	Environmental Statement
ETS	Emissions Trading Scheme
ExA	Examining Authority
FEED	Front end engineering and design
FRA	Flood Risk Assessment
Ha	Hectares
HDD	Horizontal Directional Drilling
HIA	Hydrogeological Impact Appraisal
HoT	Heads of Terms
kV	Kilovolts
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs
Mt	Million tonnes

NATS	National Air Traffic Services
NSIP	Nationally Significant Infrastructure Project
NWL	Northumbria Water Lagoon
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
PDA-	Procedural Deadline A
PINS	Planning Inspectorate
RCBC	Redcar and Cleveland Borough Council
RR	Relevant Representation
SBC	Stockton Borough Council
SEL	Sound Exposure Level
SPA	Special Protection Areas
SoCG	Statement of Common Ground
SoS	Secretary of State
STDC	South Tees Development Corporation
SuDS	Sustainable urban drainage systems
UXO	Unexploded Ordnance
WFD	Water Framework Directive

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1.0 INTRODUCTION

1.1 Overview

1.1.1 This response to the Deadline 1 submissions (Document Ref. 9.10) 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 Proposed Development

1.2.1 The Proposed Development will work by capturing CO₂ from a new gas-fired power station in addition to a cluster of local industries on Teesside and transporting it via a CO₂ transport pipeline to the Endurance saline aquifer under the North Sea. The Proposed Development will initially capture and transport up to 4Mt of CO₂ per annum, although the CO₂ transport pipeline has the capacity to accommodate up to 10Mt of CO₂ 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** – 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** – wastewater disposal connections (the '**Water Discharge Connection Corridor**');
- **Work No. 6** – a CO₂ gathering network (including connections under the tidal River Tees) to collect and transport the captured CO₂ 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 '**CO₂ Gathering Network Corridor**');

- **Work No. 7** – a high-pressure CO₂ compressor station to receive and compress the captured CO₂ from the Low Carbon Electricity Generating Station and the CO₂ Gathering Network before it is transported offshore (the '**HP Compressor Station**');
- **Work No. 8** – 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 (the '**CO₂ 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 CO₂ 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 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 crossings beneath the River Tees.

1.3 The Purpose and Structure of this Document

1.3.1 The document provides the Applicants' comments on a number of the submissions made by Interested Parties at Deadline 1 (26 May 2022). The document is structured as follows:

- Section 2 – Comments on submissions by Womble Bond Dickinson on behalf of Huntsman Polyurethanes (UK) Limited ASI Suggested Locations [REP1-048].
- Section 3 – Comments on Environment Agency comments on Relevant Representations [REP1-049].
- Section 4 – Comments on Marine Management Organisation comments on Relevant Representations and Statement of Common Ground [REP1-050].
- Section 5 – Comments on North Tees Limited Notification of wish to speak at further hearings and wish to attend a further ASI [REP1-051].
- Section 6 – Comments on Orsted Hornsea Project Four Limited Written Summaries of Oral Case at Issue Specific Hearing 1 (ISH1) and Issue Specific Hearing 2 (ISH2) [REP1-052].

1.3.2 The Applicants have sought to provide comments where it is helpful to do so. In respect of other submissions the Applicants either have no comments or matters are addressed in other submissions.

2.0 COMMENTS ON HUNTSMAN POLYURETHANES (UK) LIMITED SUBMISSIONS

2.1.1 The Applicants note Huntsman Polyurethanes (UK) Limited's (HPUs) proposed locations for a further Accompanied Site Inspection (ASI) and has the following comments:

- HPU's Aniline site is located on Wilton International – the Applicants note that this is located outside of the Order Limits and do not consider that a specific ASI in this location will assist the Examination
- Sembcorp piping run south of NWL – this location was visited during the ASI on 12th May 2022. The attendees were able to observe the existing apparatus within the Sembcorp link line corridor.
- Tunnel 2 including headhouses – this location was visited during the ASI on 12th May 2022. The attendees were able to observe the existing apparatus and constraints within both the North and South headhouses, as well as a view of the shafts from the headhouse. This is considered to be adequate to enable a good understanding of Tunnel 2.
- Connection between Tunnel 2 headhouse and Exolum Terminal – this location was visited during the ASI on 12th May 2022. The attendees were able to observe the existing apparatus within the Sembcorp link line corridor entering the North headhouse and the adjacent Exolum Terminal.

3.0 COMMENTS ON ENVIRONMENT AGENCY SUBMISSIONS

- 3.1.1 The Applicants have reviewed the Environment Agency's Deadline 1 submission and believe that the points raised have been responded to in the Applicants' Relevant Representations submitted at Deadline 1 [REP1-045].

4.0 COMMENTS ON MARINE MANAGEMENT ORGANISATION SUBMISSIONS

- 4.1.1 The Applicants' note paragraph 1.2.3 of the Marine Management Organisation's Deadline 1 submission and will continue to engage with Natural England with regard to any potential impacts on internationally designated nature conservation sites and the Habitats Regulations Assessment for the Proposed Development.

5.0 COMMENTS ON NORTH TEES LIMITED SUBMISSIONS

5.1 Suggested Sites for Accompanied Site Inspection

5.1.1 The Applicants note North Tees Group's (NTG's) proposed location for a further ASI and has the following comment:

- Should the Examining Authority consider it necessary the Applicants would be happy to participate in an ASI on NTG landholdings. Given NTG's presence is required to facilitate access, the Applicants propose that NTG develop an appropriate itinerary for this location and coordinate the visit (with the Applicants as required).

6.0 COMMENTS ON ORSTED HORNSEA PROJECT FOUR LIMITED SUBMISSIONS

6.1 Overview

- 6.1.1 At Deadline 1, Orsted Hornsea Project Four Limited ('Orsted') provided written summaries of their oral submissions from Issue Specific Hearings 1 and 2.
- 6.1.2 The substance of these submissions referred to below:
- 6.1.3 Actions 2, 3 and 4 from ISH1 , which respectively requested for (i) consideration of whether Orsted's Hornsea Project Four Offshore Wind Farm DCO ("Hornsea Project 4") (currently at examination) should be further considered in the Net Zero Teesside DCO ("NZT DCO") EIA, (ii) a SoCG between the Applicants and Orsted to be submitted, and (iii) an outline of the options available to the Secretary of State when determining the Hornsea Project 4 DCO and their associated implications for the deliverability of the Proposed Development; and
- 6.1.4 Actions 32 and 33 from ISH2, which overlapped to an extent with the actions from ISH1 (discussed above) (in terms of the scenarios available to the SoS in determining Hornsea Project 4), but also enquired about the potential for a 'co-existence agreement' between the parties and Orsted's preferred form of protective provisions to be included in the NZT DCO.
- 6.1.5 The Applicants provided their own submissions in respect to those same action points at Deadline 1 [REP1-035 & REP1-036] and do not propose to repeat the same submissions at this Deadline. Instead, the Applicants have only responded where considered necessary/helpful to further clarify the Applicants' position in view of Orsted's written submissions.
- 6.1.6 For ease of cross-reference, the Applicants have set out the relevant extract from Orsted's submissions in italicised text and then responded underneath.

6.2 Orsted's Submissions from Issue Specific Hearing 1

"Discussions on co-existence have been ongoing for a number of years. It was confirmed that Hornsea Four is willing to seek to agree a Statement of Common Ground with the Applicant which may assist in highlighting the current differences in view of the extent to which the benefits of both NSIPs can be realised and the information which is relevant to decision making on this application."

- 6.2.1 This follows from Action 3 from ISH1.
- 6.2.2 Whilst the Applicants agree with the conceptual attraction of a SoCG to highlight areas of agreement, on-going discussion or, indeed, disagreement between parties, having considered further, the Applicants do not consider such an approach to realistically be able to provide any informational value to the Examining Authority in the current circumstances and have confirmed the same to Orsted.
- 6.2.3 The Applicants have previously referenced the extensive submissions which bp (as operator on behalf of NEP)] has made into the Hornsea Project 4 DCO examination

(Planning Inspectorate reference EN010098) regarding Orsted and bp's competing technical and legal arguments as to whether co-existence between the proposed offshore carbon storage facility (the "Endurance Store") and Hornsea Project 4 is possible within an overlapping area of seabed (the "Overlap Zone").

- 6.2.4 Such submissions were initially presented through the prism of a 'joint position statement', which provided some initial introductory text to the respective projects, the background to the interface between the projects in the Overlap Zone and then appended separate position statements from each party in relation to the material issues relating to the same .
- 6.2.5 The need for separate position statements was reflective of the lack of 'common ground' which existed between the parties, and the expectation that this would not change during the course of the examination.
- 6.2.6 Having reviewed Orsted's submissions at Deadline 1, the same appears to be true in the context of the NZT DCO and, in such circumstances, the Applicants do not consider there to be any merit in attempting to agree a 'joint' document which simply records areas of on-going disagreement. In these circumstances, the Applicants consider it to be more appropriate and efficient for each party to make their own representations in their own words as they consider necessary.
- 6.2.7 The Applicants are of course happy to further consider this position if, notwithstanding the above, the ExA concludes such a document is still preferred, but would again emphasise that this would not be expected to provide any greater informational value than would be provided in its absence and so wishes to manage any expectations in that respect.
- "...it may well be that the issue of co-existence and overlap can be dealt with by appropriate provisions within the Applicant's DCO that in some way link the outcomes and contain reciprocal obligations in the Applicant's DCO to the outcomes decided within the Hornsea Four examination, and confirmed that Hornsea Four are willing to have those discussions with the Applicant to try to find a solution."*
- 6.2.8 The Applicants have previously explained [REP1-035 & REP1-045] that the Proposed Development does not extend to the Overlap Zone. It therefore does not have any direct physical conflict with Hornsea Project Four.
- 6.2.9 The Applicants further clarified in its response to Deadline 1 [REP1-035] that the Proposed Development remains acceptable and deliverable in its own right, regardless of the outcome in the Hornsea Project 4 DCO and the SoS' determination in relation to the interface between the Endurance Store and Hornsea Project 4 in the Overlap Zone.
- 6.2.10 As such, the Applicants do not consider there to be any justification or need for any co-existence or provisions requiring the same between the Applicants and Orsted in the context of the Proposed Development.

6.2.11 To simplify matters, there is nothing proposed to be authorised under the NZT DCO which would physically interact with or present an impediment to the project proposed to be authorised under the Hornsea Project 4 DCO.

6.2.12 Such interface is limited to the Endurance Store which is being consented separately from the Proposed Development [REP1-035].

"There is likely to be a timing issue. There is an ongoing examination for Hornsea Four Offshore Wind Farm which is just under 3 months in to that process. A decision on the Hornsea Four application will therefore not be available to the ExA for the Proposed Development within the timescales that it has to report to the Secretary of State. If there is any delay to the Hornsea Four Offshore Wind Farm DCO process, there may be no decision on the Hornsea Four Offshore Wind Farm DCO when the Proposed Development is being determined by the Secretary of State."

6.2.13 This overlaps to an extent with the submissions made above. The Applicants consider the timing of the determination of the Hornsea Project 4 DCO to be immaterial to a certain extent, given the Proposed Development remains independently acceptable and deliverable regardless of such outcome (as advocated in the Applicants' submission at Deadline 1 [REP1-035]).

6.2.14 However, in circumstances where there was a material delay to the Hornsea Project 4 DCO such that the Proposed Development fell due for determination by the SoS first, the Applicants acknowledge that this would mean the SoS having to consider the need to disapply the Interface Agreement in the NZT DCO (see Article 49 of the NZT DCO) in advance of determining the same point in the Hornsea Project 4 DCO, where the substantive submissions in relation to this point would have been examined.

6.2.15 In those narrow circumstances (which considering the respective timings of the different DCOs would seem particularly unlikely), the Applicants would nevertheless consider the SoS would be able to reach a conclusion based on the information he would have before him, having regard to the ExA's recommendation report on the Hornsea Project 4 DCO and the further explanatory context provided by the Applicants in support of Article 49 in REP1-035 (see electronic page 175).

6.2.16 To the extent the SoS was not satisfied he had sufficient information (or, in the exceptionally unlikely circumstances that the ExA's recommendation from Hornsea Project 4 had not been provided), then it would be open for the SoS to request further submissions from the Applicants and Orsted to assist with his decision-making at that point in time.

6.2.17 Other than the proposed disapplication of the Interface Agreement pursuant to Article 49 of the NZT DCO, there is no other interaction between the NZT DCO and the Hornsea Project 4 DCO and so no need for a provision linking the determination of the two.

"Hornsea Four's position is that it is necessary that the ExA understand the impacts on Hornsea Four Offshore Wind Farm when making a recommendation on the

application for the Net Zero Teesside DCO. Given the technical nature of some of the points in dispute and of the information submitted into the Hornsea Four DCO process to date, in order to make a recommendation, the ExA in the Net Zero Teesside DCO may need to hear technical evidence and be able to question that evidence"

- 6.2.18 It is unclear whether this in reference to Orsted's earlier submission regarding the suggested deficiency in the Proposed Development's Environmental Statement or more generally to the interaction between the projects, or both.
- 6.2.19 To the extent it's focussed on the Environmental Statement's consideration of the Proposed Development's impacts on Hornsea Project 4, the Applicants responded to this point in response to Action 2 of ISH1 [REP1-035] and confirmed the intention to provide an assessment of the impacts of the Endurance Store on Hornsea Project 4 by Deadline 4.
- 6.2.20 Alternatively, if it's a more general comment about the Proposed Development's interaction with Hornsea Project 4, then the Applicants would refer to the submissions above which confirm the absence of any interface between the Proposed Development and Hornsea Project 4. The technical points in dispute to which Orsted refer are matters specific to the interface between the Endurance Store and Hornsea Project 4 and so entirely appropriate to be considered in the context of the Hornsea Project 4 DCO, but of no relevance to the examination of the Proposed Development (save where acknowledged above).

"Mr McCallum noted that without an appropriate mechanism in the DCO which would impose controls on the CCUS scheme necessary to give effect to any conclusions under the Hornsea Four DCO process, it is not clear how this issue can be overcome without some element of duplication of technical evidence on impacts and potential mitigations within the Net Zero Teesside DCO examination."

- 6.2.21 The Applicants consider these points have been addressed in the responses provided to the equivalent submissions above; however, for completeness, the Applicants do not consider there to be any justification or need for any reciprocal or linking provision to the outcome of the Hornsea Project 4 DCO, nor any requirement to re-litigate the same technical evidence in the NZT DCO's examination. The Applicants are, of course, though happy to provide any such further information or clarification the ExA considers necessary in either respect.

6.3 Orsted's Submissions from Issue Specific Hearing 2

- 6.3.1 Orsted's submissions primarily focus on their stated need for protective provisions to be included in the NZT DCO for the benefit of Hornsea Project 4, and describe three potential scenarios open to the SoS when determining the Hornsea Project 4 DCO.
- 6.3.2 The Applicants provided their own appraisal of the scenarios available to the SoS in response to Action 32 from ISH2 as part of their Deadline 1 submissions [REP1-036] and do not repeat the same in response here to limit duplication. However, to further respond to specific aspects of the submissions:

"In the third scenario, which is the outcome preferred by Hornsea Four, if deemed feasible and appropriate both parties may be coming forward with infrastructure in the Overlap Area. There is therefore a need for proper engagement to manage interface risks should they arise."

- 6.3.3 In this scenario (described as Scenario 4 in the Applicants' own submission at Deadline 1 [REP1-035], where the Hornsea Project 4 DCO is made with Orsted's protective provisions preferred to the alternative set put forward by bp, it would follow that the Interface Agreement would remain extant and it would similarly be assumed that Article 49 (which duplicates the provision set out in bp's preferred protective provisions proposed in the Hornsea 4 DCO by disapplying the Interface Agreement) would also not be included in the NZT DCO if granted.
- 6.3.4 In those circumstances, any engagement on the interface would continue to be managed through the Interface Agreement and the protective provisions included in the Hornsea Project 4 DCO.
- 6.3.5 There would be no need or justification to repeat the same in the NZT DCO, given the absence of any physical interface between the Proposed Development and Hornsea Project 4 (as set out above).

"Hornsea Four's proposed protective Provisions put a hold on wind development in the Overlap Area and require Hornsea Four to engage with BP to establish the degree to which turbines can be accommodated in the Overlap Area. There is no such reciprocal obligation on BP as the proposed CCS operator within the current proposed development consent provisions to engage with Hornsea Four to establish the degree to which the two projects can co-exist."

"The necessary reciprocal obligation could be achieved by Hornsea Four and BP entering into a commercial side agreement to regulate co-operation between the parties, which failing there is a need for appropriately worded Protective Provisions to be included within the Net Zero Teesside DCO for the benefit and protection of Hornsea Four. These protective provisions would essentially pause the elements of the development that would be authorised by the Net Zero Teesside DCO unless and until it has been established that offshore interface issues have been agreed or determined"

"Hornsea Four is committed to engaging with the Applicant on these matters to reach agreement on a solution, but in the event agreement cannot be reached, Hornsea Four will submit its proposed Protective Provisions to the ExA for their consideration."

As above, the Applicants do not consider there to be any need or justification for any provision in the NZT DCO which conditions the Proposed Development to the Hornsea Project 4 DCO outcomes or requires any prior agreement with Orsted on the interface between the Endurance Store and Hornsea Project 4 in the Overlap Zone. For the same reasons, the Applicants do not intend to negotiate a commercial side agreement which purports to secure the same.