KEADBY
NEXT GENERATION
POWER STATION
Hydrogen-enabled flexible power

A collaboration between SSE Thermal and Equinor

The Keadby Next Generation Power Station Project

Document Ref: 8.1

Planning Inspectorate Ref: EN0110001

The Keadby Next Generation Power Station Development Consent Order [year]

Land at, and in the vicinity of, the existing Keadby Power Station (Trentside, Keadby, Scunthorpe DN17 3EF)

Applicant's Comments on Relevant Representations (Deadline 1)

The Planning Act 2008

The Infrastructure Planning (Environmental Information Assessment) Regulations 2017

Applicant: Keadby Next Generation Limited

Date: February 2026

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1. Introduction

1.1. Overview

1.1.1. This document 'Applicant's Comments on Relevant Representations' **(Application Document Ref. 8.1, Rev. 1)** has been prepared on behalf of the Applicant, Keadby Next Generation Limited, in respect of an application (the 'Application') for a Development Consent Order (DCO) in respect of the Keadby Next Generation Power Station (the 'Proposed Development') that was submitted to the Secretary of State (SoS) for Energy Security and Net Zero under Section 37 of 'The Planning Act 2008' on 29 August 2025. The Application was accepted for Examination by the SoS on 22 September 2025. The Examination of the Application commenced on 21 January 2026.

1.1.2. The Applicant is seeking a DCO for the construction, operation and maintenance of a new combined cycle gas turbine (CCGT) electricity generating station on land at, and in the vicinity of, the existing Keadby Power Station, Trentside, Keadby, Scunthorpe, DN17 3EF ('the Site').

1.1.3. The Proposed Development is a new CCGT electricity generating station with a capacity of up to 910 megawatts electrical output. The CCGT electricity generating station will be designed to run on 100% hydrogen and able to run on 100% natural gas or a blend of natural gas and hydrogen and will be located on land to the west of the existing Keadby 1 and Keadby 2 power stations. The Proposed Development includes connections for cooling water, electricity, hydrogen, natural gas, and construction laydown areas and other associated development. It is described in full in **Environmental Statement (ES) Volume I Chapter 4: The Proposed Development [APP-038].**

1.1.4. The DCO, if made by the SoS, would be known as 'The Keadby Next Generation Power Station Order' ('the Order').

1.2. The Purpose and Structure of this Document

1.2.1. The purpose of this document is to set out the Applicant's present position on the matters raised in all the Relevant Representations (RR) submitted by Interested Parties (IPs) in respect of the Application. It represents an updated version (Rev. 1) of the **Applicant's Comments on Relevant**

Representations [PDA-001] that was submitted by the Applicant at the Pre-examination Procedural Deadline of 14 January 2026.

1.2.2. The full text of the RRs and the Applicant's comments on these (in alphabetical order) are set out within the document as follows:

- Section 2 – Addleshaw Goddard LLP on behalf of Network Rail Infrastructure Limited (RR-017)
- Section 3 – Associated British Ports (RR-001)
- Section 4 – Canal and River Trust (RR-002)
- Section 5 – Christine Abbott (RR-003)
- Section 6 – Climate Emergency Science Law (CESL) (RR-004)
- Section 7 – Defence Infrastructure Organisation (RR-005)
- Section 8 – DWF Law LLP on behalf of PD Ports (RR-019)
- Section 9 – Environment Agency (RR-006)
- Section 10 – E-Plane Ltd (RR-007)
- Section 11 – Fisher German LLP on behalf of National Gas Transmission Limited (RR-014)
- Section 12 – Historic England (RR-008)
- Section 13 – Isle of Axholme & North Nottinghamshire Water Level Management Board (RR-009)
- Section 14 – James Hewitt (RR-010)
- Section 15 – Leeds City Council (RR-011)
- Section 16 – Lincolnshire Wildlife Trust (RR-012)
- Section 17 – Natural England (RR-013)
- Section 18 – Maritime and Coastguard Agency (RR-022)
- Section 19 – National Grid Electricity Transmission Plc (RR-015)
- Section 20 – National Highways (RR-016)
- Section 21 – North Lincolnshire Council (RR-018)
- Section 22 – Robert Palgrave (RR-020)
- Section 23 – Timothy Wye (RR-021)
- Section 24 – UK Health Security Agency (RR-023)
- Section 25 – Weightmans LLP on behalf of Northern Powergrid (Yorkshire) Plc (RR-024)

2. Response to Addleshaw Goddard LLP on behalf of Network Rail Infrastructure Limited

2.1.1. The RR provided by Network Rail Infrastructure Limited (RR-017) is as follows:

"*This is the section 56 representation of Network Rail Infrastructure Limited (Network Rail) provided in respect of Keadby Next Generation Limited (the Promoter) application for a development consent order (the Order) for the construction of the Keadby Next Generation Power Station Development Consent Order (the Scheme). Network Rail is a statutory undertaker and owns, operates and maintains the majority of the rail infrastructure of Great Britain (the Railway).*

The Order sought by the Promoter includes development consent for a combined cycle gas turbine electricity generating station designed to run on 100% hydrogen (the ambition is that this would be the fuel used from inception) and able to run on 100% natural gas of up to 910 megawatts net electrical output; hydrogen and natural gas supply infrastructure, water supply and electricity connections; above ground installations; utilities connections; construction laydown areas; access; and other associated and ancillary development (the Scheme).

The Promoter seeks authority and powers in the draft Order to:

a) permanently acquire rights over land in the ownership and occupation of Network Rail; b) temporary use of land over which Network Rail is an occupier in respect of rights; c) permanently acquire land over which Network Rail is an occupier in respect of rights; and d) permanently acquire rights over land in which Network Rail is an occupier in respect of rights.

The affected plots are as summarised below:

1. *Plot 2-34 - Acquisition of new rights over 63.17 square metres of private road (Keadby Two Lane) and bridge structure over railway (South Humberside Main Line); south of Ealand Road, Keadby, Scunthorpe*
2. *Plot 3-159 - New Rights over 2489.61 square metres of unnamed private road, woodland and grassland; east of Chapel Lane, Keadby, Scunthorpe; and overhead cables – Occupier in respect of Rights*
3. *Plot 3-161 - Acquisition of new rights over 228.26 square metres of water pumping station; east of Chapel Lane, Keadby, Scunthorpe*

4. *Plot 3-168 - Permanent acquisition of 2105.76 square metres of woodland; east of Chapel Lane, Keadby, Scunthorpe*
5. *Plot 3-193 - Temporary Use of 68.72 square metres of unnamed drain and grassland; west of Trent Side, Keadby, Scunthorpe*
6. *Plot 3-194 - New Rights over 55.15 square metres of unnamed drain and grassland; west of Trent Side, Keadby, Scunthorpe*
7. *Plot 3-195 - Temporary Use of 4415.59 square metres of hardstanding forming part of commercial premises known as PD Ports, Station Road, Scunthorpe DN17 3BN*

Network Rail wishes to ensure that the Scheme will not have a detrimental impact on the operation of the Railway and that the safety of the Railway is maintained during the construction, operation and ongoing maintenance requirements of the Scheme.

As the Promoter proposes to compulsorily acquire new rights over railway land as well in close proximity to railway assets, Network Rail hereby objects to the making of the Order in principle on the ground that the powers sought are likely to interfere with the safe and efficient operation of the Railway and cause a serious detriment to the carrying on of Network Rail's statutory undertaking.

In order for Network Rail to be in a position to withdraw its objection Network Rail will require adequate protective provisions to be included within the Order (and for the avoidance of doubt Network Rail require these Protective Provisions to be in the form set out at Appendix 1 to this Relevant Representation) and an agreement with the Promoter to ensure that the new rights sought are exercised in regulated manner to prevent adverse impacts to the Railway.

Network Rail is continuing to review the Promoter's plans, draft Order and application documents, and will continue to work constructively with the Promoter to clarify any issues raised. The Examining Authority and the Secretary of State will need to be satisfied that railway safety and operations will not be compromised by the making of the Order.

Network Rail hereby requests that the Examining Authority treats Network Rail as an Interested Party for the purposes of the Examination and Network Rail reserves the right to produce additional and further grounds of concern when further details of the Scheme and its effects on Network Rail's assets are available."

2.1.2. The Applicant's response to Network Rail's Relevant Representation is provided below.

2.1.3. In accordance with 'Planning Act 2008 Guidance related to procedures for the compulsory acquisition of land' (September 2013) the Applicant has a clear idea of how it intends to use the land, and the land and interests sought are no more than is reasonably required to build and operate the Proposed Development. Whilst the draft DCO [AS-003] contains powers of compulsory acquisition, the Applicant continues to actively engage in negotiations to secure voluntary agreements wherever possible in parallel with the exercise of such powers to ensure that the Proposed Development can be delivered in a timely manner.

2.1.4. The Applicant has included bespoke protective provisions in the draft DCO [AS-003] for the benefit of Network Rail (Part 6 of Schedule 9). These provisions provide Network Rail with significant protections in relation to the carrying out of the Proposed Development. For example, paragraph 64 states that the undertaker must not prevent access to any railway property without Network Rail's consent and must not do anything which would result in railway property being incapable of being used or maintained, or which would affect the safe running of trains on the railway. It also requires the undertaker to enter into an asset protection agreement if requested by Network Rail prior to the commencement of construction of any 'specified work' (defined as any work situated within 15 metres of, or which may adversely affect, railway property). Paragraph 65 provides for Network Rail to be provided with plans prior to the carrying out of any specified work and requires Network Rail's approval of such plans before the specified work may commence. Paragraph 65 also provides for Network Rail to require protective works in connection with any specified works, should that be considered reasonably necessary.

2.1.5. The Applicant is in ongoing discussions with Network Rail regarding the protective provisions and will continue to engage with Network Rail to agree the protective provisions for the benefit of Network Rail prior to the close of the Examination. In line with Government Guidance "Guidance on the content of a Development Consent Order required for a Nationally Significant Infrastructure Project", the Applicant is seeking to ensure that the protective provisions accurately reflect the Proposed Development and does not consider it correct that Network Rail's preferred form of protective provisions should simply be included without being adapted appropriately for the Proposed Development.

3. Response to Associated British Ports

3.1.1. The RR provided by Associated British Ports (RR-001) is as follows:

"*Good morning, I represent Associated British Ports as the Harbour Authority on the Humber Estuary. Our boundary line for the River Trent stems from the Apex at the confluence with the River Humber as far as Gainsborough Stone Bridge. These proposed works fall within our jurisdictional boundary. We have already held consultation meetings with the developers, offering opinions on viable operations and structures within an actively used part of the Trent. We would like to register as an interested party with the Planning Inspectorate for any operational contributions*."

3.1.2. The Applicant acknowledges the representation from Associated British Ports. The Applicant would like to take the opportunity to thank them for their inputs to the Navigational Risk Assessment (Appendix 12C, APP-075) which clarified that the activities in the River Trent relate to the use of the existing berth at Railway Wharf for the delivery of Abnormal Indivisible Loads during the construction phase of the Proposed Development. That assessment concludes that the risk are low to medium, and that with mitigation, the risk reduces to low. It is not considered that any further response is required at this time but the Applicant is engaging with ABP in order to reach a commercial agreement.

4. Response to Canal and River Trust

4.1.1. The RR provided by the Canal and River Trust (RR-002) is as follows:

"*The Canal & River Trust is a charitable organisation and is the landowner and navigation authority for the Stainforth & Keadby Canal within the proposed Order Limits of the Project. The Trust has a duty under the Trust Agreement with the Secretary of State for Environment, Food and Rural Affairs (28 June 2012) to operate and manage the waterways for public use and enjoyment. Additionally, the Trust has a duty under section 105 Transport Act 1968 to maintain commercial waterways in a suitable condition for use. This duty applies to the relevant part of the Canal.*

The proposed Order Limits of the Project extend up to and includes part of the Stainforth & Keadby Canal to the east of Bridge 83, Keadby Rail Drawbridge, as part of Work Number 5. We understand that this relates to proposals to abstract water from the canal. To the south east, we note that it is proposed to utilise an existing mooring location on the River Trent to the north of Keadby Lock. Whilst the Trust is not Navigation Authority for the River Trent in this location, we do manage Keadby Lock, which has the potential to be impacted by moorings in this location. The proposed Order Limits for the project includes parts of the River Trent surrounding Keadby Lock, which would need to be crossed by vessels accessing the canal from the river.

The following matters are of interest to the Trust, and we request that the examination considers these points.

Traffic and Transport: Access to and from the Stainforth & Keadby Canal: The Stainforth & Keadby Canal is utilised by leisure users and associated tourist related business. It is also used by freight transport. It is the primary waterway providing access between the River Trent towards South Yorkshire. No practical diversionary route exists for waterway users on vessels that cannot travel through the Humber Estuary. The entrance to the canal from the River Trent is through Keadby Lock.

Paragraph 10.7.11 from Chapter 10: Traffic and Transport [APP-044] confirms that delivery of Abnormal Indivisible Loads (AIL) to the Project site will use the same routes as those used for the delivery of AIL associated with the construction of Keadby 2 Power Station. It is expected that the largest AIL will be received at the Port of Immingham and barged down the River Trent to the Waterborne Transport Offloading Area at Keadby Railway Wharf, next to Keadby Lock. Previously, for the Keadby 2 project (consented under s36 of the Electricity Act 1989), it was agreed

with the Applicant that the Trust would issue Notices to Mariners (Notices and Stoppages) to provide mariners with forewarning of closures.

During the development of Keadby 2, it was observed that some vessels arrived at the offloading point outside of times agreed by the Trust, often due to delays occurring at sea. This resulted in unscheduled closures of Keadby Lock, which prevented craft entering or leaving the canal. Unscheduled closures of the lock can result in boats becoming stranded on the River Trent, which is tidal at the location next to the lock, which has significant health and safety implications. This Navigational Safety risk is not assessed in Appendix 12C: Navigational Risk Assessment [APP-075] (e.g. 12C.9), and we suggest that this risk is assessed and addressed by the Applicant.

During the Keadby 2 project, Covid-19 restrictions meant that vessel movements into Keadby Lock were limited, reducing the risk at that time. It is expected that this health and safety risk will be more pertinent during the construction of the Project.

In response to concerns raised by the Trust at pre-application, the Applicant's Outline Construction and Environmental Management Plan (CEMP) [APP-166] states that 'notices to Mariners ('Notices and Stoppages') will be requested through the Canal and River Trust to provide forewarning to mariners of closures' (page 90). We have concern that this is the same process that was employed for the Keadby 2 project, and that it was not fully adhered to as vessels arrived outside of agreed times, with little notice given to the Trust. Whilst we broadly welcome the Applicant's statement that they will work closely with the Trust to minimise disruption (Outline CEMP page 28), no detail has been provided to confirm how the issue identified during the Keadby 2 project of vessels arriving outside of agreed hours will be rectified.

The submitted plans include the inclusion of areas of the River Trent in front of Keadby Lock. The submitted draft DCO [AS-003], within Article 19, would give powers to the undertaker to close this section of the river to traffic, which would prevent passage between the canal and the river. This goes beyond what was sought in the previous consent for the Keadby 3 Carbon Capture Power Station Project (EN010114). These powers pose a risk to users of the canal unless suitable mitigation can be secured.

In addition, for Keadby 3, the DCO was subject to a requirement for the provision of a Wharf Management Plan under Requirement 25(1)(c). The Trust welcomes the Applicant's confirmation that a Wharf Management Plan will be a Requirement of the draft DCO for the Project as is set out in

Appendix 12C: Navigational Risk Assessment [APP-075]. However, the Trust's position is that the aim of the Wharf Management Plan should be to prevent all arrivals outside of scheduled times. The Trust accepts that in a very limited number of cases that may be unavoidable and would welcome any plan also including detail of the procedures to be followed in those instances.

The Trust intends to work with the Applicant to confirm how the Trust's concerns regarding access to Keadby Lock can be addressed.

Impact on navigation along the Keadby & Stainforth Canal:

The proposals include the temporary use of a cofferdam within the Stainforth & Keadby Canal in order to facilitate the construction of abstraction pipelines. This will restrict the navigable width of the canal whilst the cofferdam is in place. Paragraph 10A.5.9 in Appendix 10A: Transport Statement [APP-065] highlights that it is proposed to use a temporary cofferdam projecting 10m from the north bank of the Stainforth & Keadby Canal with an additional 10m temporary working area beyond this (total area of 20m), which will reduce the navigable space by between 10m and 20m. Although this paragraph states that the Trust has agreed to this, this is incorrect and we have raised this with the Applicant. A loss of 20m in width for navigable passage would not allow for vessels to pass safely next to the site. We request that the total restriction in navigable width should be limited to 10m. We wish to highlight that the Keadby 2 project utilised abstraction equipment built using cofferdams extending within 10m of the north bank of the canal and no justification has been provided to confirm why an additional projection is required.

We note that the submitted Land Plans [APP-014] include the proposed use of land parcels 3-163 and 3-164, which extends more than 10m into the canal. As presently drafted, Article 19 of the draft DCO [AS-003], would give powers to the Applicant to close this section of the canal to traffic, which would limit safe east-west passage on the canal for indefinite periods which is unacceptable without suitable mitigation.

Impact on the Canal During Construction:

Appropriate precautions are required to ensure that no significant vibrations occur alongside works to install the cofferdam in the canal. This is necessary as vibrations could result in damage to the canal structure, and could result in localised landslips to the canal in a worst case scenario. We note that the Outline CEMP [APP-166] does identify mitigation that may be employed. Appropriate mitigation includes the use

of resonance free piling techniques (i.e. not driven piling) and vibration monitoring.

Construction works are proposed to take place both in and next to the canal with regards to the proposed construction of the abstraction equipment. Risks of silt mobilisation from the construction of coffer dams, and the scour of the canal bed and canal banks would need to be addressed during the construction phase. The submitted Outline CEMP does identify that appropriate mitigation will be adopted in the Final CEMP (e.g. page 72). Due to the direct interaction of works with the canal, the Trust would wish to review the Final CEMP documentation prior to its adoption to ensure that the proposed mitigation will be effective and can be accommodated on site.

Visual Impact on the Canal: The Landscape and Visual Impact Assessment (LVIA) [APP-048] and baseline views confirm that the primary issue for the canal concerns the loss of amenity for recreational users. Existing trees play a role in screening the lower parts of the power station, a positive, natural quality of the canal side, which helps reduce the prominence of outward views towards the power plant complex. We acknowledge that the upper sections of the Keadby 1 and 2 power station structures are prominent and visible, as shown in views 2, 2a, and 14. There are also visible areas of infrastructure directly along the canal side.

The Project would include the loss of established trees to the west of the abstraction site. Section 14.7.2 of the LVIA [APP-048] states that "It is considered that the addition of landscape features such as trees and woodland would not be effective in reducing these effects on visual amenity." However, we believe that this is inaccurate, as observations on site by the Trust at this location highlight that existing trees and vegetation effectively soften the impact of the extensive infrastructure at lower levels from the canal side; and replanting trees would achieve the same positive benefit.

We therefore request that it is ensured that replacement trees are incorporated in this location. The Trust would need to review a further landscape plan of the proposed planting locations if they differ from the current location. Any new trees would need to be native, be able to effectively soften the development, and require root protection to prevent damage to infrastructure.

We anticipate that new boundary treatments may be required in proximity to the canal in connection with the development of the abstraction equipment, which corresponds with the description of the development

within paragraph 4.2.2 Chapter 4: The Proposed Development [APP-038]. The final appearance and siting of any new boundary treatment could have a significant impact on the outward appearance of the canal, and we request that full details of this are secured as part of the DCO if granted. The use of a mesh style fence with a green or black finish could help reduce the prominence of any new fence, helping to retain the semi-naturalistic landscape character between the canal and the main power station complex.

Abstraction from the canal: The incorporation of an additional abstraction point from the Stainforth & Keadby Canal is proposed as part of Work No. 5 (Water Supply Connection Works) in the draft DCO [AS-003]. The works to install the abstraction require the consent of and grant of a licence from the Trust, as landowner and statutory undertaker for the waterway. Canal improvement works are necessary to enable the proposed abstraction to take place. These include works to Keadby Lock, which are discussed in the submitted Environment Statement.

An existing abstraction licence from the canal is in place. This does, however, require to be renewed before 31 March 2026. The Trust are in discussions with the applicant about this, and we understand a new application for this will be submitted by the promoter to the Trust by the end of 2025. The current abstraction licence can be used for either the previously approved Keadby 3 scheme or the Project, but not both.

The proposed abstraction apparatus has the potential to impact upon navigational safety, ecology and the outward character and appearance of the canal corridor. We therefore request that the exact details of abstraction, notably with regards to the angle of flow, and any eel screen details are made a requirement of the DCO if granted so that the full impact can be assessed by the Trust, and that the Trust are included as a consultee within any such wording. We note that Requirement 5 of the draft DCO requires the submission of details of Work No 5, which could include this information, and includes the Trust as prescribed consultee.

Other Comments: The Trust is a statutory undertaker which has specific duties in relation to the Keadby & Stainforth canal. Accordingly, we have a duty to resist the use of compulsory purchase powers which may negatively affect our land or undertaking. Disposals by the Trust of operational land require internal approvals to satisfy its own policies and Charity Commission rules and time should be allowed for this in the transaction process.

Compulsory purchase is intended as a last resort to secure the assembly of all the land needed for the implementation of projects and should only be made where there is a compelling case in the public interest. Accordingly, the Applicant will need to demonstrate that they have taken reasonable steps to acquire all of the land and rights required for the Project by agreement.

The Applicant originally agreed terms with CRT's agent, Gerald Eve. CRT have now appointed Avison Young, to whom the formerly agreed HOTs were issued on 27 November 2025 following a meeting that took place on 4 November 2025. Comments are awaited. We expect voluntary agreements for the land and rights required for the Project will be in place before the close of the examination.

The Trust is in the process of agreeing Protective Provisions with the Applicant. Those submitted within the draft DCO [AS-003] are not yet agreed, but there are few issues outstanding and we expect Protective Provisions to be agreed during the examination.

The Trust reserves the right to raise additional points or issues during Examination and looks forward to engaging further on the Application."

4.1.2. The Applicant's response to the Canal and River Trust's Relevant Representation (RR) is provided below.

4.1.3. The Applicant acknowledges the representation from the Canal and River Trust (CRT) and notes that the Trust is the statutory navigation authority for the Stainforth and Keadby Canal and operates Keadby Lock which controls passage between the Canal and the River Trent.

4.1.4. The Applicant acknowledges comments made by the Trust on the need for improvements to the abnormal loads notification system and mitigation measures previously used for the Keadby 2 project. Building upon lessons-learned from Keadby 2, as acknowledged in Table 12C.9 of Environmental Statement (ES) Appendix 12C: Navigational Risk Assessment [APP-075], the Applicant includes proposals to request Notices to Mariners (Notices and Stoppages) through the Trust to provide mariners with forewarnings of any closures. It is confirmed that notification of a shipping movement schedule will be hosted and maintained by the Applicant (rather than the Contractor) to help provide all mariners with up-to-date information on any planned or required closures. With this, and other measures in place, that assessment confirms that there is no unacceptable impact and that the risk is "low".

4.1.5. As noted in the CRT's RR, the Applicant also proposes to develop a Wharf Management Plan in consultation with the Canal and River Trust. This would be secured by Requirement 22 (3(c)) in the draft DCO [AS-003]. As part of the development of this plan, the Applicant welcomes discussion with the CRT around mitigation measures to address the concerns around out of hours deliveries. The Applicant does wish to note that such deliveries would be by exception and are not anticipated to be the planned method of waterborne deliveries.

4.1.6. In relation to the concern raised by the CRT regarding the red line boundary extending over the entrance of Keadby Lock, the Applicant can clarify that the area extending over the entrance of Keadby Lock relates only to a mooring point located to the south of the Lock that may need to be used for safe mooring during scheduled construction phase deliveries. The Parties are continuing to engage to address the concerns raised in relation to the boundary at this location and maintaining access to Keadby Lock.

4.1.7. The Applicant notes in Table 12C.5 of ES Appendix 12C: Navigational Risk Assessment [APP-075] that the Site allows for a total working area of up to 20m ingress into the Keadby Canal for construction of the cofferdam (which is expected to be positioned approximately 10m into the Canal). The 20m working area cited throughout the ES accounts for the potential need to position workboats alongside the cofferdam, to aid in the construction and removal of the cofferdam. It is noted that exact construction methodologies have not yet been detailed, so this projection is to maintain flexibility in potential construction methodologies which could reasonably be required. The Applicant has updated the draft DCO at Deadline 1 ( ) to include reference to Article 19 (Temporary interference with canal and River Trent and public rights of navigation) under paragraph 32. This means that the Applicant will not be able to exercise this power without the consent of the CRT. This amendment has been made to address any concerns that the CRT have over the proposed workings in the Canal and is consistent with the approach agreed for the Keadby 3 CCS Power Station DCO.

4.1.8. The Applicant confirms that consideration has been given in Section 9.6 of ES Chapter 9: Noise and Vibration [AS-013] to potential vibration effects associated with construction and removal of a cofferdam within the Stainforth and Keadby Canal for the canal water abstraction option (Work No. 5) on the Keadby Canal wash walls and Keadby Lock, a Scheduled Monument (Noise Sensitive Receptor (NSR) 12). Effects due to construction vibration on these structures as assessed in ES Chapter 9 (including Table 9.26) and are anticipated to be not significant. Requirement 25 (control of noise and vibration – construction) of the draft DCO [AS-003] and provisions in the Outline Construction Environmental

Management Plan (CEMP) [APP-166] (secured by Requirement 16 of the draft DCO) provide the relevant and appropriate controls to mitigate construction related vibration effects of the Proposed Development on canal infrastructure.

4.1.9. The Applicant confirms that provisions in the Outline CEMP [APP-166] provide the relevant and appropriate controls to mitigate effects related to silt mobilisation and scour during the installation and removal of the cofferdam. The Applicant notes the request for the CRT to be included as a consultee on the details of the final CEMP and has updated the wording of Requirement 16 in the draft DCO [AS-003] to include the CRT as a consultee on matters related to their function.

4.1.10. The Applicant notes the request for replacement planting at the intake structure where trees are proposed to be removed and refers the CRT to the biodiversity planting proposals set out in the Outline LBMEP Report [APP-161] and Indicative Landscape and Biodiversity Plan [AS-007]. These proposals include replacement woodland planting around the proposed intake adjacent to the Stainforth and Keadby Canal. The species proposed are to be of native canopy tree species as noted in Paragraph 5.2.37 of the Outline LBMEP Report.

4.1.11. The Applicant notes the point raised by the CRT about the need to renew the existing abstraction licence by 31 March 2026 and welcomes ongoing discussions on this matter.

4.1.12. The Applicant confirms that Requirement 5(5) (Detailed Design) of the draft DCO [AS-003] secures the method of construction, siting, layout, scale and external appearance of any new, upgraded or replacement intake structures within the waterway, including the screens to be installed to those structures in accordance with the Eel (England and Wales) Regulations 2009(a) and any ancillary plant, buildings, enclosures or structures. Notwithstanding, in the development of the final detailed design the Applicant will take into consideration the CRT's suggestions in relation to boundary treatment at the intake structure.

4.1.13. As noted by the CRT, Requirement 5(5) (Detailed Design) of the draft DCO [AS-003] also includes that the details are to be submitted to and in consultation with the CRT approved by the relevant planning authority. The Applicant considers that the inclusion of the CRT as a consultee for the detailed design of Work No. 5 in Requirement 5(5) (Detailed Design) of the draft DCO will provide appropriate controls to the CRT to safeguard the navigational safety, ecology and character of the Canal in relation to installation of abstraction equipment.

4.1.14. The Applicant is in ongoing discussions with the CRT regarding their concerns around Keadby Lock. Protective provisions have been included for the benefit of the CRT in Part 3, Schedule 9 of the draft DCO. These provisions provide the CRT with significant protections in relation to the carrying out of the Proposed Development. For example, paragraph 32 provides that various powers under the DCO may only be exercised in relation to the CRT's interests with its consent, including interference with access; the discharge, supply and drainage of water; surveys; and the compulsory acquisition and temporary use of land and rights. Paragraph 33 provides for the CRT to be provided with plans prior to the carrying out of any 'specified works' (defined as works taking place in, on, under or over the waterway or which may affect the waterway or any function of the CRT and requires it's approval of such plans before the specified works may commence. Paragraph 33 also provides for the CRT to require protective works on land it holds or controls in connection with any specified works, should that be considered reasonably necessary.

4.1.15. The Applicant will continue to engage with the CRT to agree the protective provisions prior to the close of the Examination. In line with Government Guidance "*Guidance on the content of a Development Consent Order required for a Nationally Significant Infrastructure Project"*, the Applicant is seeking to ensure that the protective provisions accurately reflect the Proposed Development. The Applicant is also in discussions with the CRT regarding a new abstraction licence.

5. Response to Christine Abbott

5.1.1. The RR provided by Christine Abbott [RR-003] is as follows:

"*I strongly oppose this Project for reasons including:*

Environmental and Biodiversity Impacts: Mitigation measures are proposed, however the full impact of disturbances to local wildlife and water quality cannot be fully assessed.

Air quality and emissions during the transitional natural gas phase are unacceptable for nearby residents, given the site's history as a former coal-fired station.

Flood Risk and Water Environment: The site is near the River Trent raising serious flood risk concerns. The ES includes assessments of water supply needs and potential impacts on local hydrology, however, it is likely the Plan will exacerbate flood risks in this low-lying area causing danger to life.

Community and Socio-Economic Issues: Noise, visual impacts, pollution and traffic during construction (expected to last several years) will adversely harm nearby residents in Keadby and Scunthorpe. Why should they suffer this upheaval?

The project promises job preservation and creation, however, any benefits noted are outweighed by mass disruptions and harm to the area and residents.

Serious health and safety concerns arise from hydrogen storage/transport despite developers emphasize building on existing site procedures.

High Emissions Risk: Lifecycle emissions, including underreported upstream methane leaks from LNG imports and hydrogen leaks, can exceed those of direct natural gas use by up to 20% or more, potentially consuming 22-64% of the UK's Sixth Carbon Budget and derailing net zero targets.

Economic Drawbacks: Production costs (~£6/kg or £200/barrel equivalent) are higher than grey hydrogen and projected green alternatives (£3-5/kg by 2030), requiring substantial taxpayer subsidies (£240m grants + £1bn for CCS) and facing "first-mover" risks that deter investment.

Technological and Infrastructure Hurdles: CCS capture rates must exceed 90% for low-carbon compliance, but are unproven at scale; hydrogen leaks amplify warming (33x CO2 over 20 years); and CCS infrastructure integration adds complexity, delays with unproven technology and supply-demand "chicken-and-egg" issues.

Policy and Environmental Concerns: UK standards (e.g., <20 gCO2e/MJ) are strict but criticized via low methane leak assumptions (0.72% actual vs. government estimates).

I urge the ExA to reject this proposal."

5.1.2. The Applicant would like to provide the following information in relation to the key concerns raised for each of the topics noted.

Biodiversity

5.1.3. The assessment of biodiversity impacts is presented in ES Chapter 11: Biodiversity and Nature Conservation [APP-045] and the supporting ES Appendices 11A [APP-066] to 11G [APP-072]. The mitigation provisions are set out in multiple documents contained within the Application, including the Outline Landscape and Biodiversity Management and Enhancement Plan (LBMEP) Report [APP-161], the Outline Construction Environmental Management Plan (CEMP) [APP-166] and the draft DCO [AS-003]. The Applicant considers these documents to provide a robust assessment of the effects of the Proposed Development on biodiversity.

Air Quality

5.1.4. The emissions from the operational Proposed Development will meet the required emission limit values set by the Environmental Permitting regime, which are set at concentrations that facilitate the ambient Air Quality Standards to be met, with appropriate stack heights employed to ensure adequate dispersion of the emissions is achieved in order to protect the general public.

5.1.5. The Air Quality Impact Assessment presented in ES Chapter 8 [APP-042] demonstrated that the dispersion of theemissions associated with both natural gas and hydrogen firing resulted in a very similar level of air quality effect, and both were considered to be negligible, and pose no risk to the attainment of the Air Quality Standards.

Flood Risk and Water Environment

5.1.6. Flood Risk is considered within ES Appendix 12A: Flood Risk Assessment (FRA) [AS-015]. To determine whether the land raising for the Proposed Development changes River Trent flood risk to third party property and land, the Proposed Development land raising was simulated for various flood scenarios. This was undertaken because land raising in areas that flood can reduce the volume of floodplain storage and/or deflect flood water to other areas of land. This may result in areas flooding which would otherwise have not been inundated, or where it may increase the depth of

flooding that would occur in the baseline. The FRA and associated modelling demonstrate that the Proposed Development, and land raising mitigation would make negligible difference to the River Trent flood risk experienced by third party property and land in the event of flood defence overtopping. These results have also been confirmed by the Environment Agency who have reviewed the modelling files and results.

5.1.7. The impact of the Proposed Development on water quality is considered within ES Appendix 12: Water Environment and Flood Risk [APP-046] and the supporting Appendix 12B: Water Environment (Water Framework Directive) Regulations Assessment [AP-074]. The Outline CEMP [APP-166] along with the Outline Water Management Plan provided in Appendix C of the Outline CEMP includes mitigation provisions for the water environment. The Applicant considers these documents to provide a robust assessment of impacts and the necessary precautions to mitigate adverse effects.

Community and Socio-economic

5.1.8. The assessments of socio-economic and human health impacts are presented in ES Chapter 16: Socio-economics [APP-050] and ES Chapter 17: Population and Human Health [APP-051]. The effects of noise are considered in ES Chapter 9: Noise and Vibration [AS-013], and the effects of visual impact by ES Chapter 14: Landscape and Visual Amenity [APP-048]. The effects of traffic are set out in ES Chapter 10: Traffic and Transport [APP-044] and the effects of air emissions by ES Chapter 8: Air Quality [APP-042]. The Applicant considers these documents provide a robust assessment of the effects of the Proposed Development on the community.

Hydrogen Storage and Transport

5.1.9. The Applicant refers to ES Chapter 4: The Proposed Development [APP-038] paragraph 4.5.13 where the Applicant has confirmed that there will be no storage of hydrogen at the Site as part of the Proposed Development. Hydrogen will be supplied to the Site via pipeline as detailed in Section 4.2 of ES Chapter 4. The Applicant also notes that paragraphs 4.5.23 to 4.5.30 of ES Chapter 4 sets out the approach taken to Hazard Prevention and Emergency Planning. The Applicant also refers to ES Chapter 19: Major Accidents and Disasters [APP-053] which provides an assessment of effects of the Proposed Development on the environment arising from the vulnerability of the Proposed Development to risks of relevant major accidents and disasters and includes measures envisaged to prevent or

mitigate any likely significant adverse effects and details of preparedness for and response to emergencies.

5.1.10. The Applicant considers that the safety and risk assessments which have been undertaken for the Proposed Development (as explained in the documents mentioned above) provide a sufficiently robust assessment of the health and safety aspects related to hydrogen supply and use at the Site such that the risks have been designed to be as low as reasonably possible.

GHG Emissions

5.1.11. The Greenhouse Gas (GHG) Assessment provided in ES Chapter 18: Climate Change [APP-052] for the Proposed Development applies standard UK Government emissions factors, which are updated annually, for the upstream natural gas supply chain which explicitly includes venting, flaring and fugitive emissions of methane. The use of such official factors within a standardised methodology means that the whole life GHG impact of different developments can be assessed in a consistent manner resulting in directly comparable emissions data.

5.1.12. Emissions resulting from hydrogen leakage within the transmission network and the Proposed Development have been included within the GHG assessment, with confidence levels representing a worst-case scenario.

5.1.13. The GHG Assessment provided in ES Chapter 18: Climate Change [APP-052] takes into account the contribution of GHG emissions from the Proposed Development to the relevant UK Carbon Budgets.

Hydrogen Production, Carbon Capture Technology and the Low Carbon Hydrogen Standard

5.1.14. The Proposed Development will be an offtaker of low carbon hydrogen, helping to stimulate the low carbon hydrogen economy by creating demand. This supports Government policy to transition to clean power by 2030.

6. Response to Climate Emergency Science Law (CESL)

6.1.1. The RR provided by Climate Emergency Science Law [RR-004] is as follows:

"*1 Climate Emergency Science Law (CESL), established in 2017 by Dr Andrew Boswell, brings together multidisciplinary expertise in science, computing, energy and climate governance, and evidence-based legal and policy analysis to deliver rigorous, scientifically grounded scrutiny of UK climate decision-making.*

(Section A) SUMMARY

2 CESL submits that the Environmental Impact Assessment (EIA) for the Keadby Next Generation Power Station (the "development") materially understates greenhouse-gas emissions, misrepresents the feasibility of blue and green hydrogen supply, and omits legally significant considerations arising from the recent International Court of Justice (ICJ) Advisory Opinion and domestic UK law.

3 The EIA relies on outdated upstream methane data, implausible hydrogen supply trajectories, and an incorrect characterisation of "reasonable worst case" Low Carbon Hydrogen Standard (LCHS) values. The result is a GHG significance assessment that cannot be relied upon for decision-making. CESL respectfully requests that the Examining Authority requires full re modelling of GHGs lifecycles using up to date science and credible fuel-mix assumptions.

4 Further, the development is flawed when power is generated from each of the three main fuel sources: natural gas, blue hydrogen or green hydrogen (and any combination of them). Natural gas combustion introduces new unabated gas into the UK electricity power system just when national and international policy is to move away from unabated gas. Blue hydrogen combustion relies on hydrogen which recent science shows cannot be produced without very high upstream emissions. Green hydrogen combustion effectively cycles clean electricity from renewables through a complex process of which the output is around 24–36% of the original electricity whilst incurring penalties such as generating air pollution.

(Section B) KEY TECHNICAL POINTS

B.1 Gas Supply Trends Not Modelled

5 The EIA does not model the projected change in UK natural gas supply, specifically the rapid and well documented rise in Liquified Natural Gas

(LNG) imports as North Sea and Norwegian pipeline gas declines. Authoritative sources including DESNZ and Ofgem [1], Wood Mackenzie [2] and NESO [3] project a structural shift toward LNG through the 2030s. LNG carries substantially higher upstream methane intensity. By failing to model this trend, the EIA materially understates upstream emissions throughout the development lifetime.

B.2 Failure To Use Current LNG Methane Science

6 Recent satellite, remote-sensing and first-principles peer-reviewed scientific studies (Howarth 2024 [4]; Zhu et al. 2024 [5]) and independent analyses (Carbon Tracker 2024) [6] show that real world methane leakage from LNG supply chains is significantly higher than the values assumed in the development's EIA, which are derived from outdated 2015 datasets. Supply chain emissions from the UK basin are also underreported [7]. Current evidence shows that approximately two thirds of full lifecycle GHG emissions from LNG occur before the gas reaches the UK. Continued use of outdated emission factors is inconsistent with best available science and leads to material understatement of lifecycle emissions, affecting both the modelling of natural gas and blue hydrogen fuel supply for the development.

B.3 False Modelling of Blue Hydrogen Carbon Intensity

7 The EIA assumes all hydrogen, including blue hydrogen, can be supplied below 20 gCO_2e/MJ_H2. No credible evidence supports this assumption. Peer reviewed and industry studies place LNG based blue hydrogen between 120–180 gCO_2e/MJ_H2 [8, 9]. The Applicant has provided no evidence demonstrating that blue hydrogen could meet the much lower LCHS threshold. As blue hydrogen is widely held not to be able to meet LCHS thresholds, then the EIA's scenarios relying on blue hydrogen are not legally or technically deliverable, and cannot represent a reasonable worst case.

8 The implication within the EIA that green and blue hydrogen may be "blended" to reduce average intensity (to meet the LCHS threshold) is not transparent and potentially uses hydrogen fuel which breaches the LCHS standard. Under the LCHS, carbon intensity is assessed per-kg of hydrogen supply, not averaged across unrelated sources; the EIA offers no evidence that compliant hydrogen could be supplied.

9 The EIA must assess the development using scientifically credible and evidence-based assumptions regarding fuel characteristics during operation; the Applicant has not demonstrated that blue hydrogen meeting the LCHS threshold could be supplied for the development.

B.4 Application Of Global Warming Potential (GWP) Metrics

10 Methane is a fast acting greenhouse gas with a concentrated 20 year heating impact (corresponding to the first two decades of proposed operation of the development (2031–2050)). Reliance solely on modelling its effects over 100 years (using the GWP100 metric) masks short term heating by a factor of approximately a factor of approximately three (82.5 vs 29.8) based on IPCC AR6 values [15].

11 The EIA does not use the GWP20 metric which models the "likely significant effects " of methane in the supply chain over 20 years – the years to 2050 for the development operating from 2031 when the world and the UK must radically reduce emissions. Further GWP20 is appropriate when the development's GHG impact is dominated with methane upstream emissions (for both natural gas and blue hydrogen fuel supplies), and the development operates over the same period. This omission further suppresses the accurate assessment of the development's actual near term climate impacts (ie: the "likely significant effect"), affecting both the modelling of natural gas and blue hydrogen fuel supply.

12 While GWP100 is used for national inventory reporting, the EIA Regulations require assessment of 'likely significant effects', and the near-term warming impact of methane is materially relevant to the 2031–2055 operational window.

B.5 Hydrogen Supply Scenarios Are Not Credible

13 The Climate Change Committee (CCC) Seventh Carbon Budget projects green hydrogen reaching only ~50% of UK supply by 2040 [11]. This national modelling does not show sufficient green hydrogen volumes for the Applicant's Scenarios A–C to be logically possible. The scenarios assume both early and large scale green hydrogen availability and a total supply of hydrogen below 20 gCO_2e/MJ_H2 – as above, any significant portion of blue hydrogen in the "blend" renders this threshold impossible. These assumptions are inconsistent with the CCC, DESNZ analysis, and UK policy commitments. The scenarios are not scientifically or evidentially supported, and therefore cannot represent a legitimate basis for assessing significant effects.

14 In accordance with the EIA Regulations 2017, the Environmental Statement must be based on realistic, evidence-based assumptions and credible forecasting methods. An assessment based on implausible hydrogen supply scenarios, as well as outdated upstream methane data, and incorrect LCHS assumptions cannot align with regulatory requirements for a 'reasonable worst case' approach or provide the information reasonably required to assess the development's likely significant effects on the environment.

B.6 GHG Significance Assessment Is Invalid

15 Because upstream emissions for both natural gas and blue hydrogen fuels are materially underestimated, and the hydrogen availability assumptions are implausible, the GHG significance assessment presented at APP 050 Table 18.12 is unreliable. The assessment cannot be relied upon until upstream methane, hydrogen intensity and plausible scenarios are re modelled using the latest science.

B.7 Green Hydrogen Combustion Is Inherently Wasteful (and no Options Appraisal)

16 Burning hydrogen produced from renewable electricity (ie: green hydrogen) in CCGT-class turbines results in substantially reduced overall efficiency, with the peer-reviewed literature showing power-to-hydrogen-to-power round-trip efficiencies of approximately 24–36%. This means that for every three units of renewable electricity used to produce hydrogen, only about one unit of electricity is returned, largely due to electrolyser losses, storage and compression losses, turbine derating, and the need for NO_x-control measures during hydrogen combustion. By contrast, using the same renewable electricity directly—via electrification or established storage technologies—delivers significantly higher system efficiency and avoids these additional air-quality and performance impacts. In essence, the element of green hydrogen combustion as proposed in the development takes three green electrons and outputs one electron with added pollution.

17 This is relevant because the energy conversion pathway fundamentally determines the GHG emissions profile and therefore the 'likely significant effects' under the EIA Regulations. By diverting green electricity into this power-to-hydrogen-to-power round-trip in order to combust it in the development, GHG emissions savings that may potentially be made by the original renewable energy displacing emissions emitting energy infrastructure elsewhere is lost. This is not just a wasteful method, but it has serious repercussions for the EIA assessment of the GHGs from the development which have not been addressed by the Applicant. This falls under the EIA regulations, which require reliable, evidence-based forecasting of likely significant effects.

18 For the element of green hydrogen combustion in the development, no options appraisal has been carried out for using the original renewably generated electricity directly into the UK Grid as opposed to in the development which relies upon the wasteful cycle of green hydrogen production and then conversion back to electricity, losing two thirds of the electricity in the process for this end-point. In the absence of an options appraisal, the EIA cannot demonstrate that the selected approach represents a realistic or environmentally robust operational mode.

B.8 Blue Hydrogen Combustion Is Inherently Wasteful

19 Converting natural gas to blue hydrogen, and then combusting it generates approximately 55–65% of the electrical output as if the original natural gas were combusted. This is due to the comparative lower efficiency of burning hydrogen than methane, energy penalties in Auto-thermal Reforming (ATR) blue hydrogen production (including a carbon capture penalty). Typical ATR + CCS conversion pathways deliver ~55–65% of the electrical output compared to direct natural-gas combustion. A recent peer-reviewed paper states that 1 kg of natural gas produces 48.60 MJ whilst conversion to blue hydrogen reduces the energy output to 31.21 MJ (64%) [10].

20 This again is relevant because the energy conversion pathway fundamentally determines the GHG emissions profile and therefore the 'likely significant effects' under the EIA Regulations. By diverting natural gas through a gas-to-hydrogen process in order to combust it in the development, more natural gas needs to be extracted. Howarth & Jacobson [8] conclude that blue hydrogen offers no climate advantage over simply burning natural gas. Any small reduction in CO_2 achieved through carbon capture is outweighed by the much higher fugitive-methane emissions across the gas supply chain, resulting in total GHG emissions that are as large as, or larger than, direct natural-gas combustion. This is not just a wasteful technique, but it has serious repercussions for the EIA assessment of the GHGs from the development which have not been addressed by the Applicant.

B.9 Flawed "Future baseline" analysis

21 The narrative at APP-050, 18.4.4-18.4.10 is based only on comparisons in favour of the development – for example, displacement of older CCGT equipment (18.4.7). However, the analysis does not investigate comparisons that do not favour the development – for example, the approximate power loss of 64-76% when delivery of renewable energy directly to the grid is displaced by using it to deliver the green hydrogen element of the development's operation. EUA Regulations Schedule 4 paragraph 3 requires the EIA to describe the likely evolution of the baseline without the development using available environmental information and scientific knowledge; the omission of unfavourable comparisons is inconsistent with this requirement.

B.10 Unrealistic Emissions Reductions Commitments

22 The Greenhouse Gas Reduction Strategy [AS-016] claims that "SSE aims to achieve net-zero GHG emissions across its Scope 1 and Scope 2 emissions by 2040 and for remaining Scope 3 emissions by 2050". No credible evidence of how this will be achieved is given, nor how this relates to the Applicant's calculated full lifecycle emissions (which are severe underestimates for the reasons enumerated above) at AS-016,

Table 4, nor how it may be delivered within the natural gas and hydrogen supply markets and dynamics in the future.

B.11 No transparent modelling of NOx emissions from hydrogen combustion

23 There is considerable literature showing that combustion of hydrogen in a CCGT plant gives hotter flames and higher thermal NOx than methane for the same power output: hydrogen's adiabatic flame temperature in air is ≈160–300 °C higher than methane's, and industrial trials report 20–30% higher NOx when switching from natural gas to 100% hydrogen without extra abatement. Chapter 8 of the EIA [APP-042] appears not to have modelled or addressed this. NO_x impacts are a required part of assessing likely significant effects under the EIA Regulations.

(Section C) KEY LEGAL POINTS

24 The EIA does not make reference to the International Court of Justice (ICJ) unanimous Advisory Opinion (AO) of 23 July 2025 [12]. This confirms that States have authoritative obligations of stringent due diligence and "highest possible ambition" to align their mitigation measures with "the 1.5 °C limit" and principles of equity and inter-generational justice. It states that the "failure of a state to take appropriate action to protect the climate system from greenhouse gas emissions—including through fossil fuel production, fossil consumption, the granting of fossil fuel exploration licences or the provision of fossil subsidies—may constitute an internationally wrongful act." This constitutes a significant development in international law or policy, and is generally recognised as making more stringent obligations on states. The EIA does not engage with how the Secretary of State will comply with these obligations in determining the application. This is a material omission.

25 Although the Applicant states that the EIA applies "reasonable worst-case" methodology to GHGs, CESL have pointed out issues where the reasonable worst case has not been correctly established. This includes the use of emissions factors which do not align with the latest peer reviewed scientific evidence on upstream methane emissions, and the near-term warming impact of methane, resulting in materially lower GHG estimates than a correctly scientifically aligned approach. In these circumstances, the EIA does not appear to satisfy the legal tests articulated in the Finch [13] and Whitehaven [14] cases regarding the need for decision-makers to be provided with "full knowledge of the environmental cost" and for likely significant effects to be assessed on a scientifically credible, forward-looking basis. The Applicant has yet to demonstrate that a lawful reasonable worst-case has been established, and therefore the EIA may not meet the standard of assessment required by recent case law.

26 Where the EIA relies on assumptions that are not scientifically supportable, the resulting characterisation of 'likely significant effects' is not reliable. The Applicant has yet to demonstrate that a legitimate reasonable worst case has been assessed in accordance with the EIA Regulations.

(Section D) REQUESTS TO THE EXAMINING AUTHORITY

CESL respectfully requests that the Examining Authority require the Applicant to:

(A) Answer all the points made in this Relevant Representation via Examiner's Questions.

(B) Provide revised development operation scenarios consistent with the hydrogen supply scenarios in the CCC Seventh Carbon Budget projections.

(C) Re model the full lifecycle emissions using current LNG methane science (post 2023), and the GWP20 metric.

(D) Redo the GHG significance assessment (APP 050 Table 18.12)

(E) Produce a detailed policy and legal compliance statement addressing the ICJ Advisory Opinion, and latest UK case law.

(Section E) NOTIFICATION OF ERROR

27 APP-050, 18.3.49 incorrectly states the "IPCC estimates CH4 to have a GWP of 56 over a 20-year timespan, as opposed to 21 over 100 years (IPCC, 2023)". The actual values from the latest IPCC report are 82.5 for GWP20 and 29.8 for GWP 100 [REDACTED].

(Section F) EVIDENCE AND REFERENCES

A LNG share of Natural Gas Supply

[1] DESNZ/Ofgem – Statutory Security of Supply Report 2024 – Confirms declining domestic production, GB's "second-largest LNG import capacity in Europe," and expansion at Grain LNG from mid-2025, underscoring LNG's growing structural role. [REDACTED]

[2] Wood Mackenzie (Oct 2025) – Projects the UK will rely on "US LNG for 60%+ of gas supply by 2035", with supply-chain intensity rising as the mix shifts from pipeline to LNG. [redacted]

[3] Reuters (Oct 2025 winter outlook) – NESO warns that tighter balances can mean a greater requirement for LNG imports in colder conditions—illustrating system dependence on LNG at the margin. [redacted]

B Recent science on full lifecycle emissions

[4] Howarth 2024 [REDACTED]

[5] Zhu et al. 2024 [REDACTED]

[6] Carbon Tracker 2024 "Kind of Blue" [REDACTED]

[7] 2023 RSC Energy & Environmental Science paper [REDACTED]

C Blue hydrogen carbon intensity and energy efficiency

[8] Howarth, R.W. & Jacobson, M.Z. (2021). [REDACTED]

[9] Oleksiy Tatarenko et al, "Weak Emissions Accounting Can Undermine Hydrogen's Role in Global Decarbonization",[REDACTED] 116 gCO_2e/MJ

[10] Massarweh, O., Bicer, Y. & Abushaikha, A. Technoeconomic analysis of hydrogen versus natural gas considering safety hazards and energy efficiency indicators. Sci Rep 15, 29601 (2025). [REDACTED] Blue/green share of hydrogen supply

[11] Climate Change Committee, Seventh Carbon Budget, p239 & Table 7.1.1, p237 [REDACTED]

E Recent International Law

[12] International Court of Justice (ICJ), 23 July 2025, Unanimous Advisory Opinion on the "Obligations of States in Respect of Climate Change", [REDACTED]

F Recent UK Case Law

[13] R (on the application of Finch on behalf of the Weald Action Group) v Surrey County Council and others, paragraphs 9 and 72

[14] R (on the application of Friends of the Earth and another) v Secretary of State for Levelling Up, Housing and Communities and others, paragraphs 60 and 61

G Intergovernmental Panel on Climate Change

[15] Sixth Assessment Report, The Physical Science Basis, Chapter 7, section 7.6 [REDACTED]"

6.1.2. The Applicant acknowledges the views raised by Climate Emergency Science Law (CESL) and would like to provide the following points in response.

Table 6.1: Response to Climate Emergency Science Law (CESL)

Reference	Climate Emergency Science Law Comment	Applicant Response
N/A	"*1 Climate Emergency Science Law (CESL), established in 2017 by Dr Andrew Boswell, brings together multidisciplinary expertise in science, computing, energy and climate governance, and evidence-based legal and policy analysis to deliver rigorous, scientifically grounded scrutiny of UK climate decision-making.*	Noted. No response required.
Section A - Summary	2 CESL submits that the Environmental Impact Assessment (EIA) for the Keadby Next Generation Power Station (the "development") materially understates greenhouse-gas emissions, misrepresents the feasibility of blue and green hydrogen supply, and omits legally significant considerations arising from the recent International Court of Justice (ICJ) Advisory Opinion and domestic UK law. 3 The EIA relies on outdated upstream methane data, implausible hydrogen supply trajectories, and an incorrect characterisation of "reasonable worst case" Low Carbon Hydrogen Standard (LCHS) values. The result is a GHG significance assessment that cannot be relied upon for decision-making. CESL respectfully requests that the Examining Authority requires full re modelling of GHGs lifecycles using up to date science and credible fuel-mix assumptions. 4 Further, the development is flawed when power is generated from each of the three main fuel sources: natural gas, blue hydrogen or green hydrogen (and any combination of them). Natural gas combustion introduces new unabated gas into the UK electricity power system just when national and international policy is to move away from unabated gas. Blue hydrogen combustion relies on hydrogen which recent science shows cannot be produced without very high upstream emissions. Green hydrogen combustion effectively cycles clean electricity	Please refer to Section B where the Applicant has provided responses to each of the points raised by CESL.

Reference	Climate Emergency Science Law Comment	Applicant Response
	from renewables through a complex process of which the output is around 24–36% of the original electricity whilst incurring penalties such as generating air pollution.	
Section B – Key technical points	*B.1 Gas Supply Trends Not Modelled* 5 The EIA does not model the projected change in UK natural gas supply, specifically the rapid and well documented rise in Liquified Natural Gas (LNG) imports as North Sea and Norwegian pipeline gas declines. Authoritative sources including DESNZ and Ofgem [1], Wood Mackenzie [2] and NESO [3] project a structural shift toward LNG through the 2030s. LNG carries substantially higher upstream methane intensity. By failing to model this trend, the EIA materially understates upstream emissions throughout the development lifetime. *B.2 Failure To Use Current LNG Methane Science* 6 Recent satellite, remote-sensing and first-principles peer-reviewed scientific studies (Howarth 2024 [4]; Zhu et al. 2024 [5]) and independent analyses (Carbon Tracker 2024) [6] show that real world methane leakage from LNG supply chains is significantly higher than the values assumed in the development's EIA, which are derived from outdated 2015 datasets. Supply chain emissions from the UK basin are also underreported [7]. Current evidence shows that approximately two thirds of full lifecycle GHG emissions from LNG occur before the gas reaches the UK. Continued use of outdated emission factors is inconsistent with best available science and leads to material understatement of lifecycle emissions, affecting both the modelling of natural gas and blue hydrogen fuel supply for the development.	*B.1 Gas Supply Trends Not Modelled and B.2 Failure To Use Current LNG Methane Science* The Greenhouse Gas (GHG) Assessment provided in ES Chapter 18: Climate Change [APP-052] for the Proposed Development applies standard UK Government emissions factors, issued and updated annually, for the upstream natural gas supply chain, which explicitly includes venting, flaring and fugitive emissions of methane. The Applicant notes that there are concerted efforts being taken internationally to address emissions of methane from sectors including oil and gas. Within the UK, the North Sea Transition Deal includes initiatives to decarbonise the production of oil and gas within the UK continental shelf. The Applicant considers this approach to be appropriate, and for the reasons explained below, a standard methodology accepted by the Secretary of State. Regarding the impact on upstream carbon intensities of varying sources of natural gas into the UK gas grid, the Applicant recognises that official UK Government Well to Tank factor for natural gas has varied in the past due to changes in the proportion of liquefied natural gas in the mix. But it is important to note that LNG is not the only source of imported gas, and a significantly higher proportion of the UK's gas demand is supplied from the Norwegian sector of the North Sea, and just as LNG has a higher carbon intensity than UK production, the carbon intensity of Norwegian gas

Reference	Climate Emergency Science Law Comment	Applicant Response
	B.3 False Modelling of Blue Hydrogen Carbon Intensity 7 The EIA assumes all hydrogen, including blue hydrogen, can be supplied below 20 gCO_2e/MJ_H2. No credible evidence supports this assumption. Peer reviewed and industry studies place LNG based blue hydrogen between 120–180 gCO_2e/MJ_H2 [8, 9]. The Applicant has provided no evidence demonstrating that blue hydrogen could meet the much lower LCHS threshold. As blue hydrogen is widely held not to be able to meet LCHS thresholds, then the EIA's scenarios relying on blue hydrogen are not legally or technically deliverable, and cannot represent a reasonable worst case. 8 The implication within the EIA that green and blue hydrogen may be "blended" to reduce average intensity (to meet the LCHS threshold) is not transparent and potentially uses hydrogen fuel which breaches the LCHS standard. Under the LCHS, carbon intensity is assessed per-kg of hydrogen supply, not averaged across unrelated sources; the EIA offers no evidence that compliant hydrogen could be supplied. 9 The EIA must assess the development using scientifically credible and evidence-based assumptions regarding fuel characteristics during operation; the Applicant has not demonstrated that blue hydrogen meeting the LCHS threshold could be supplied for the development. *B.4 Application Of Global Warming Potential (GWP) Metrics* 10 Methane is a fast acting greenhouse gas with a concentrated 20 year heating impact (corresponding to the first two decades of	supplied by pipeline has a carbon intensity over 70% lower than gas produced in the UK sector. Going forward, it is not possible to predict with any certainty what the overall impact of all these variables may be on the future upstream WTT carbon intensity of natural gas consumed within the UK. In these circumstances, the Applicant considers the use of the Government's official data to be the accepted approach. The Applicant maintains that it has, in accordance with the EIA Regulations, provided a reasonable worst case scenario based on the most appropriate data. In particular, the use of official UK Government emissions factors, generated according to a standardised methodology, means that the whole life GHG impact of different developments can be assessed in a consistent manner resulting in directly comparable emissions data. The Applicant would point out that the use of the UK Government upstream emissions factor was explicitly accepted in relation to the GHG assessment for the Net Zero Teesside Project examination by both the Examining Authority (see paragraph 5.3.47 of the ExA's Recommendation Report) and by the Secretary of State for Energy Security and Net Zero (see paragraph 4.46 of her decision letter). *B.3 False Modelling of Blue Hydrogen Carbon Intensity* Hydrogen supplied to the Proposed Development is expected to be compliant with the Low-Carbon Hydrogen Standard (LCHS). The purpose of this standard is to define and support the production of low carbon hydrogen. Under the standard,

Reference	Climate Emergency Science Law Comment	Applicant Response
	proposed operation of the development (2031–2050)). Reliance solely on modelling its effects over 100 years (using the GWP100 metric) masks short term heating by a factor of approximately a factor of approximately three (82.5 vs 29.8) based on IPCC AR6 values [15]. 11 The EIA does not use the GWP20 metric which models the "likely significant effects " of methane in the supply chain over 20 years – the years to 2050 for the development operating from 2031 when the world and the UK must radically reduce emissions. Further GWP20 is appropriate when the development's GHG impact is dominated with methane upstream emissions (for both natural gas and blue hydrogen fuel supplies), and the development operates over the same period. This omission further suppresses the accurate assessment of the development's actual near term climate impacts (ie: the "likely significant effect"), affecting both the modelling of natural gas and blue hydrogen fuel supply. 12 While GWP100 is used for national inventory reporting, the EIA Regulations require assessment of 'likely significant effects', and the near-term warming impact of methane is materially relevant to the 2031–2055 operational window. *B.5 Hydrogen Supply Scenarios Are Not Credible* 13 The Climate Change Committee (CCC) Seventh Carbon Budget projects green hydrogen reaching only ~50% of UK supply by 2040 [11]. This national modelling does not show sufficient green hydrogen volumes for the Applicant's Scenarios A–C to be logically possible. The scenarios assume both early and large scale green hydrogen availability and a total supply of	hydrogen production can be considered "low-carbon" if it has lifecycle emissions less than 20 gCO_2e/MJ_{LHV} at the point of production. The standard is technology-neutral in that it does not discriminate between hydrogen from different sources, e.g. blue, green, pink etc. Applying UK Government emissions factors for the upstream natural gas supply chain (see above) together with projected carbon capture rates means that blue hydrogen from steam methane reformation with CCS can be considered compliant with the LCHS. If a significant proportion of green hydrogen was in the hydrogen supply mix this would be expected to reduce the carbon intensity of the hydrogen supply further below the threshold for the LCHS. *B.4 Application Of Global Warming Potential (GWP) Metrics* CESL is correct to point out that the GWP20 value for methane cited in Chapter 18 of the ES [APP-052] was taken from an earlier IPCC report, and that the most recently published value is higher. However, this is not material to the outcome of the GHG Assessment or any evaluation of significance, as this value was not used in any of the calculations. Regarding use of the GWP100 value for methane in preference over the higher GWP20 value, the Applicant maintains that the GWP value effective over a 100-year time horizon remains the most appropriate figure to be used in an assessment of this nature. The annual methodology paper that accompanies the UK Government's most recent emissions factor dataset explicitly states that *"Values for the non-carbon dioxide (CO_2) GHGs, methane (CH_4) and nitrous*

Reference	Climate Emergency Science Law Comment	Applicant Response
	hydrogen below 20 gCO_2e/MJ_H2 – as above, any significant portion of blue hydrogen in the "blend" renders this threshold impossible. These assumptions are inconsistent with the CCC, DESNZ analysis, and UK policy commitments. The scenarios are not scientifically or evidentially supported, and therefore cannot represent a legitimate basis for assessing significant effects. 14 In accordance with the EIA Regulations 2017, the Environmental Statement must be based on realistic, evidence-based assumptions and credible forecasting methods. An assessment based on implausible hydrogen supply scenarios, as well as outdated upstream methane data, and incorrect LCHS assumptions cannot align with regulatory requirements for a 'reasonable worst case' approach or provide the information reasonably required to assess the development's likely significant effects on the environment. *B.6 GHG Significance Assessment Is Invalid* 15 Because upstream emissions for both natural gas and blue hydrogen fuels are materially underestimated, and the hydrogen availability assumptions are implausible, the GHG significance assessment presented at APP 050 Table 18.12 is unreliable. The assessment cannot be relied upon until upstream methane, hydrogen intensity and plausible scenarios are re modelled using the latest science. *B.7 Green Hydrogen Combustion Is Inherently Wasteful (and no Options Appraisal)* 16 Burning hydrogen produced from renewable electricity (ie: green hydrogen) in CCGT-class turbines results in substantially	*oxide (N_2O) are presented as CO_2 equivalents, using Global Warming Potential factors from the IPCC's fifth assessment report (IPCC, 2014) (GWP for CH_4 = 28, CWP for N_2O = 265). This is consistent with reporting under the United Nations Framework Convention on Climate Change (UNFCCC) and consistent with the UK GHGI [GHG Inventory], upon which the 2025 GHG Conversion Factors are based".* The Applicant does not consider it would be reasonable to utilise a measure which is not, as per the Government's position, consistent with the UK GHG inventory. Furthermore, the Methodology Report accompanying the Seventh Carbon Budget submission by the Climate Change Committee also states that these are the same GWP values used when developing the UK carbon budgets: *"In line with current UNFCCC reporting and as applied in the UK's emissions inventory, we use GWP100, which compares the warming effects of gases over a 100 year time horizon. Also in line with current international practice, we use the GWP values reported in the IPCC's Fifth Assessment Report without climate feedbacks".* The Global Warming Potentials (GWPs) for methane as well as for other greenhouse gases applied within the GHG assessment are therefore entirely consistent with those used to generate the UK Government's standard emissions factors and by the Committee on Climate Change to develop statutory advice on the UK's national carbon budgets. Using any other GWPs to reflect longer or shorter time horizons would result in GHG data that could not be contextualised against the UK's pathway to net zero.

Reference	Climate Emergency Science Law Comment	Applicant Response
	reduced overall efficiency, with the peer-reviewed literature showing power-to-hydrogen-to-power round-trip efficiencies of approximately 24–36%. This means that for every three units of renewable electricity used to produce hydrogen, only about one unit of electricity is returned, largely due to electrolyser losses, storage and compression losses, turbine derating, and the need for NO_x-control measures during hydrogen combustion. By contrast, using the same renewable electricity directly—via electrification or established storage technologies—delivers significantly higher system efficiency and avoids these additional air-quality and performance impacts. In essence, the element of green hydrogen combustion as proposed in the development takes three green electrons and outputs one electron with added pollution. 17 This is relevant because the energy conversion pathway fundamentally determines the GHG emissions profile and therefore the 'likely significant effects' under the EIA Regulations. By diverting green electricity into this power-to-hydrogen-to-power round-trip in order to combust it in the development, GHG emissions savings that may potentially be made by the original renewable energy displacing emissions emitting energy infrastructure elsewhere is lost. This is not just a wasteful method, but it has serious repercussions for the EIA assessment of the GHGs from the development which have not been addressed by the Applicant. This falls under the EIA regulations, which require reliable, evidence-based forecasting of likely significant effects. 18 For the element of green hydrogen combustion in the development, no options appraisal has been carried out for using the original renewably generated electricity directly into the UK	*B.5 Hydrogen Supply Scenarios Are Not Credible* The GHG Assessment [APP-052] for the Proposed Development assumes the maximum emissions limit for the LCHS (as the Applicant has noted above) but as with the standard itself the assessment is technology neutral as to the source or colour of the hydrogen supply. Installations such as the Proposed Development are considered vital to stimulate the supply of low-carbon hydrogen. *B.6 GHG Significance Assessment Is Invalid* The significance of the Proposed Development's GHG impact has been evaluated in line with guidance issued by the Institute of Environmental Management and Assessment (IEMA). The evaluation considers GHG intensity in absolute terms, GHG intensity relative to an existing baseline, and compliance with the existing and emerging policy landscape. The Applicant notes that CESL's previous submissions on the use of this methodology have been rejected by both the Secretary of State, and courts. *B.7 Green Hydrogen Combustion Is Inherently Wasteful (and no Options Appraisal)* It is clearly the case that combusting green hydrogen resulting from electrolysis powered by renewable electricity (should this be the source of fuel supply) would inevitably result in substantially less usable power than was used in the electrolysis itself. The benefit of using such green hydrogen in the Proposed Development would be that, unlike inherently

Reference	Climate Emergency Science Law Comment	Applicant Response
	Grid as opposed to in the development which relies upon the wasteful cycle of green hydrogen production and then conversion back to electricity, losing two thirds of the electricity in the process for this end-point. In the absence of an options appraisal, the EIA cannot demonstrate that the selected approach represents a realistic or environmentally robust operational mode. *B.8 Blue Hydrogen Combustion Is Inherently Wasteful* 19 Converting natural gas to blue hydrogen, and then combusting it generates approximately 55–65% of the electrical output as if the original natural gas were combusted. This is due to the comparative lower efficiency of burning hydrogen than methane, energy penalties in Auto-thermal Reforming (ATR) blue hydrogen production (including a carbon capture penalty). Typical ATR + CCS conversion pathways deliver ~55–65% of the electrical output compared to direct natural-gas combustion. A recent peer-reviewed paper states that 1 kg of natural gas produces 48.60 MJ whilst conversion to blue hydrogen reduces the energy output to 31.21 MJ (64%) [10]. 20 This again is relevant because the energy conversion pathway fundamentally determines the GHG emissions profile and therefore the 'likely significant effects' under the EIA Regulations. By diverting natural gas through a gas-to-hydrogen process in order to combust it in the development, more natural gas needs to be extracted. Howarth & Jacobson [8] conclude that blue hydrogen offers no climate advantage over simply burning natural gas. Any small reduction in CO_2 achieved through carbon capture is outweighed by the much higher fugitive-methane emissions across the gas supply chain,	variable renewable supply, the power generated will be fully dispatchable and therefore support grid resilience and overall security of supply. It is therefore not considered appropriate to compare the use of the original renewably generated electricity directly by the UK Grid with its use to generate hydrogen for the Proposed Development, as these two scenarios are meeting different energy needs. *B.8 Blue Hydrogen Combustion Is Inherently Wasteful* The use of blue hydrogen (from steam methane reforming with CCS) effectively applies pre-combustion carbon capture; this will also result in lower overall efficiencies compared to post-combustion carbon capture. The use of blue hydrogen may be applied in preference to post-combustion CCS in the event that an installation is not able to be located in close proximity to a suitable CO_2 transport and storage system. *B.9 Flawed "Future baseline" analysis* Please refer to the responses to B.8 and B.9 above in relation to why these are not considered appropriate comparisons. The Applicant maintains that the comparison to older CCGT equipment in this instance is an appropriate comparison, as energy generated by the Proposed Development is expected to replace these higher-carbon dispatchable energy generation facilities. *B.10 Unrealistic Emissions Reductions Commitments* These emissions reduction commitments are included to demonstrate the Applicant's existing carbon reduction

Reference	Climate Emergency Science Law Comment	Applicant Response
	resulting in total GHG emissions that are as large as, or larger than, direct natural-gas combustion. This is not just a wasteful technique, but it has serious repercussions for the EIA assessment of the GHGs from the development which have not been addressed by the Applicant. *B.9 Flawed "Future baseline" analysis* 21 The narrative at APP-050, 18.4.4-18.4.10 is based only on comparisons in favour of the development – for example, displacement of older CCGT equipment (18.4.7). However, the analysis does not investigate comparisons that do not favour the development – for example, the approximate power loss of 64-76% when delivery of renewable energy directly to the grid is displaced by using it to deliver the green hydrogen element of the development's operation. EUA Regulations Schedule 4 paragraph 3 requires the EIA to describe the likely evolution of the baseline without the development using available environmental information and scientific knowledge; the omission of unfavourable comparisons is inconsistent with this requirement. *B.10 Unrealistic Emissions Reductions Commitments* 22 The Greenhouse Gas Reduction Strategy [AS-016] claims that "SSE aims to achieve net-zero GHG emissions across its Scope 1 and Scope 2 emissions by 2040 and for remaining Scope 3 emissions by 2050". No credible evidence of how this will be achieved is given, nor how this relates to the Applicant's calculated full lifecycle emissions (which are severe underestimates for the reasons enumerated above) at AS-016,	ambitions to provide context. These commitments are not being secured through the DCO application, and these figures do not have a direct impact on the outcome of the GHG Assessment presented in Chapter 18 of the ES [APP-052]. *B.11 No transparent modelling of NOx emissions from hydrogen combustion* Considerable work has been undertaken by the Applicant, engaging with turbine manufacturers, to understand the potential NOx emission concentrations from hydrogen combustion in the turbine. The flame temperature for hydrogen combustion is likely to be hotter than natural gas combustion and therefore higher thermal energy produced, but the mass emission flowrate of the flue gas is likely to be lower than natural gas. As such, the mass release is broadly comparable between hydrogen combustion and natural gas combustion. The Environment Agency has prepared combustion guidance (Environment Agency (2024) Guidance: Hydrogen Combustion: Comply with emission limit values) relating to hydrogen combustion and worked with industry to agree monitoring and control measures for hydrogen combustion. These measures and approaches have been taken into account in the assessment presented in ES Chapter 8: Air Quality [APP-042]. Due to the potential higher NOx concentrations associated with hydrogen combustion, the Applicant has included for – and assessed the potential use of – secondary NOx abatement in the form of Selective Catalytic Reduction (SCR). This is a post-combustion abatement that is used to control NOx emissions prior to release to atmosphere.

Reference	Climate Emergency Science Law Comment	Applicant Response
	Table 4, nor how it may be delivered within the natural gas and hydrogen supply markets and dynamics in the future. *B.11 No transparent modelling of NOx emissions from hydrogen combustion* 23 There is considerable literature showing that combustion of hydrogen in a CCGT plant gives hotter flames and higher thermal NOx than methane for the same power output: hydrogen's adiabatic flame temperature in air is ≈160–300 °C higher than methane's, and industrial trials report 20–30% higher NOx when switching from natural gas to 100% hydrogen without extra abatement. Chapter 8 of the EIA [APP-042] appears not to have modelled or addressed this. NO_x impacts are a required part of assessing likely significant effects under the EIA Regulations.	Through the primary and secondary controls in place, the Applicant is therefore confident that NOx emissions can be controlled to meet BAT requirements and to meet the levels assessed in the ES.
Section C – Key legal points	24 The EIA does not make reference to the International Court of Justice (ICJ) unanimous Advisory Opinion (AO) of 23 July 2025 [12]. This confirms that States have authoritative obligations of stringent due diligence and "highest possible ambition" to align their mitigation measures with "the 1.5 °C limit" and principles of equity and inter-generational justice. It states that the "failure of a state to take appropriate action to protect the climate system from greenhouse gas emissions—including through fossil fuel production, fossil consumption, the granting of fossil fuel exploration licences or the provision of fossil subsidies—may constitute an internationally wrongful act." This constitutes a significant development in international law or policy, and is generally recognised as making more stringent obligations on states. The EIA does not engage with how the Secretary of State	The relevant legal framework, which is established principally by the Climate Change Act 2008, has been considered by the Applicant and is as set out in the application documents, including the Planning Statement [AS-010] and Chapters 7 (Legislative Context and Planning Policy) and 18 (Climate Change) of the Environmental Statement [APP-041 and APP-052]. The Applicant is not a state body but has nonetheless reviewed the advisory opinion and concluded that it is not directly applicable or relevant to the Proposed Development. The opinion is not legally binding and does not alter or affect the relevant legal framework that is summarised and considered in the application documents.

Reference	Climate Emergency Science Law Comment	Applicant Response
	will comply with these obligations in determining the application. This is a material omission. 25 Although the Applicant states that the EIA applies "reasonable worst-case" methodology to GHGs, CESL have pointed out issues where the reasonable worst case has not been correctly established. This includes the use of emissions factors which do not align with the latest peer reviewed scientific evidence on upstream methane emissions, and the near-term warming impact of methane, resulting in materially lower GHG estimates than a correctly scientifically aligned approach. In these circumstances, the EIA does not appear to satisfy the legal tests articulated in the Finch [13] and Whitehaven [14] cases regarding the need for decision-makers to be provided with "full knowledge of the environmental cost" and for likely significant effects to be assessed on a scientifically credible, forward-looking basis. The Applicant has yet to demonstrate that a lawful reasonable worst-case has been established, and therefore the EIA may not meet the standard of assessment required by recent case law. 26 Where the EIA relies on assumptions that are not scientifically supportable, the resulting characterisation of 'likely significant effects' is not reliable. The Applicant has yet to demonstrate that a legitimate reasonable worst case has been assessed in accordance with the EIA Regulations.	The Applicant notes that reference is made to the fact that the ICJ opinion sets out that i) a "*highest possible ambition*" is required and ii) "*failure of a state to take appropriate action to protect the climate system from greenhouse gas emissions—including through fossil fuel production, fossil consumption, the granting of fossil fuel exploration licences or the provision of fossil subsidies—may constitute an internationally wrongful act*". The Applicant does not consider this advisory finding has a material impact on the policies set out in the National Policy Statement, or the legal requirements under the Climate Change Act 2008. His Majesty's Government confirmed that it "*is committed to our legally binding carbon budgets and to reaching net zero by 2050, matching ambition with action*". The ICJ opinion does not allege that the UK is in breach of the obligation. The Applicant further notes that the delivery of the Proposed Development will contribute to these goals, rather than conflict with them, given the development will be hydrogen-ready. The Applicant accordingly does not consider that the advisory opinion is an important or relevant matter for the purposes of the Secretary of State's decision on the Application. With regard to the Finch ruling issued by the UK Supreme Court in June 2024 and the Whitehaven judgment in September 2024, the scope of the GHG Assessment is consistent with these rulings, including the need to assess up- and downstream impacts within the wider supply and value chain. Chapter 18 (Climate Change) of the Environmental Statement [APP-052] specifically refers to up- and downstream impacts and discusses the ways in which

Reference	Climate Emergency Science Law Comment	Applicant Response
		the assessment represents a worst-case assessment based on available information
Section D – Requests to the Examining Authority	CESL respectfully requests the Examining Authority requires the Applicant to: (A) Answer all the points made in this Relevant Representation via Examiner's Questions. (B) Provide revised development operation scenarios consistent with the hydrogen supply scenarios in the CCC Seventh Carbon Budget projections. (C) Re model the full lifecycle emissions using current LNG methane science (post 2023), and the GWP20 metric. (D) Redo the GHG significance assessment (APP 050 Table 18.12) (E) Produce a detailed policy and legal compliance statement addressing the ICJ Advisory Opinion, and latest UK case law.	Queries are for the Examining Authority. No response required.
Section E – Notification of Error	27 APP-050, 18.3.49 incorrectly states the "IPCC estimates CH4 to have a GWP of 56 over a 20-year timespan, as opposed to 21 over 100 years (IPCC, 2023)". The actual values from the latest IPCC report are 82.5 for GWP20 and 29.8 for GWP 100 [REDACTED].	Please refer to Section B where the Applicant has provided a response in relation to this point.
Section F	Evidence and References.	No response required to this section of the representation.

7. Response to Defence Infrastructure Organisation

7.1.1. The RR provided by the Defence Infrastructure Organisation [RR-005] is as follows:

"DIO representing the Ministry of Defence has no safeguarding objection to the proposed development, but assessments will need to be completed to consider the impact on low flying military activity."

7.1.2. The Applicant notes the representation provided by the Defence Infrastructure Organisation (DIO).

7.1.3. The Applicant confirms that the assessments have factored in impacts on overflying aircraft as detailed in ES Chapter 2: Assessment Methodology [APP-036] paragraphs 2.1.8 to 2.1.15 which set out the consultation undertaken with the Civil Aviation Authority (CAA), NATS and the MoD Defence Infrastructure Organisation in relation to the Proposed Development. The Applicant confirms that as the stack falls below the threshold of 91.4m Above Ground Level there will be no restriction on overflying aircraft.

7.1.4. It is also noted that related guidance provided to the Applicant by the CAA has also been taken into account within Requirement 33 (Aviation warning lighting) and Requirement 34 (Air Safety) of the draft DCO [AS-003].

8. Response to DWF Law LLP on behalf of PD Ports

8.1.1. The RR provided by PD Ports Properties [RR-019] is as follows:

"*Relevant Representation on behalf of PD Ports Properties Limited, PD Port Services Limited and Associated Waterway Services Limited to the application by Keadby Next Generation Limited ("the Promoter") for the Keadby Next Generation Power Station Project ("the Project").*

This Relevant Representation is submitted on behalf of PD Ports Properties Limited (Company Number 01336570), PD Port Services Limited (Company Number 01233997) and Associated Waterway Services Limited (1852005) all of 17-27 Queens Square, Middlesborough, TS2 1AH ("PD Ports").

PD Ports wishes to make this Relevant Representation in order to protect its position in relation to its land and operations which are within and adjacent to the proposed Order limits.

PD Ports is a national port operator with 1,400 employees and 11 main locations in the UK. In the Humber, PD Ports owns four sites forming its Humber cluster of operations. This includes PD Port's site at Keadby, which is situated on the west bank of the River Trent on the northern edge of Keadby village. The site features a general cargo berth (referred to by PD Ports as Keadby wharf) and 50,000 sq. ft of warehousing and open storage. With Keadby wharf, the Keadby site can handle a diverse range of cargo including steel, forest products, dry bulks and various pallets. The Keadby site is split into two parts, to the north and south of the Keadby Canal. Access to both parts of the site is taken from the B1392 which runs between them.

Within the Order the Promoter is seeking to include the Waterborne Transport Offloading Area and additional AIL route (both as defined in the Statement of Reasons paragraphs 5.1.25 & 5.1.27 and cross referred to in the Environmental Statement Volume III Figure 3.3, with the additional AIL route marked as "Abnormal Load Haul Road").

The Waterborne Transport Offloading Area includes part of Keadby wharf and the additional AIL route is adjacent to the PD Ports' warehouse and open storage area.

The Book of Reference identifies that PD Ports holds an interest in the following Plots: 3-127, 3-193, 3-194, 3-195, 3-196, 3-199, 3-200, 3-201, 3-202, 3-203 & 3-204.

Temporary possession powers are sought within the Order over Plots 3-193, 3-195, 3-196, 3-199, 3-200, 3-201, 3-202, 3-203 & 3-204 and new rights are sought over Plots 3-127 and 3-194.

Of these Plot 3-127 comprises part of a PD Ports water main; Plots 3-193 and 3-194 comprise land used for storage, Plots 3-195 and 3-196 comprise part of the haul road adjacent to the PD Ports' warehouse and open storage area and Plots 3-199, 3-200, 3-201, 3-202, 3-203 and 3-204 comprise part of Keadby wharf.

PD Ports does not object to the principle of the underlying Project in terms of the benefits it seeks to deliver. However, it is concerned with the impact of the Project detrimentally affecting PD Ports' future operations and those of its customers.

PD Ports has entered into commercial negotiations relating to the use of parts of its Keadby site with the Promoter, however these negotiations are not yet settled. PD Ports reserves the right to make further representations during the examination process but in the meantime will continue to negotiate with the Promoter with a view to reaching a satisfactory agreement. If an agreement is signed and completed, PD Ports will notify the Planning Inspectorate and withdraw this objection.

PD Ports therefore requests to be registered as an Interested Party to the examination and to make submissions on the topics of temporary possession, compulsory acquisition powers and the Development Consent Order itself."

8.1.2. The Applicant's response to PD Ports' RR is provided below:

8.1.3. The Applicant intends to appoint PD Ports on a commercial basis to act as Ships Agent and Traffic Marshall with responsibility for managing the mooring and unloading deliveries from the River Trent onto Railway Wharf and traffic movements from Railway Wharf through the PD Ports yard (Plot 3-195) to Plot 3-188. The agreement will follow the same principles as agreed by PD Ports with other customers and they will therefore be able to coordinate movements such that there would be no detrimental impact to their business. In effect, the Applicant would simply be another customer.

8.1.4. This is the same approach that has been successfully adopted on a number of occasions previously in respect of the existing energy infrastructure whereby PD Ports occupied Railway Wharf and managed deliveries on behalf of SSE and/or its relevant subsidiaries.

8.1.5. In this scenario, the Applicant will not exercise the powers of compulsory acquisition of existing rights or creation of new rights over any of the plots identified as being owned or controlled by PD Ports. Furthermore, the

Applicant would not take occupation of any of the PD Ports' land and PD Ports will be solely responsible for managing their facility.

8.1.6. Discussions in respect of outline commercial terms for the appointment of PD Ports in a commercial capacity have taken place and the Applicant is confident that such terms will be finalised. However, the Applicant desires the grant of compulsory acquisition powers to enable the acquisition and grant of new rights as a matter of absolute last resort in the event that the position changes to ensure that the project is not unduly delayed. In such a scenario, PD Ports would be entitled to claim full compensation in respect of disturbance to its business.

8.1.7. The Applicant's preference would be to finalise a full commercial agreement whilst acknowledging that it is difficult, this far in advance, to have absolute certainty as to when the deliveries are likely to take place. In this regard, the Applicant notes PD Port's comments in respect of settling agreement prior to withdrawing their objection and will further engage to this end. Any such agreement would need to allow for the fact that various matters, for example the timing for the confirmation of the DCO, are outside of the Applicant's control.

9. Response to Environment Agency

9.1.1. The Applicant acknowledges the representation provided by the Environment Agency. The Applicant notes that post-submission discussions were held between the Parties on both 30 September 2025 and 28 October 2025 in which the Environment Agency shared the outstanding matters which have been noted in their representation. As agreed between the Parties, the Outline CEMP [APP-166] and draft DCO [AS-003]have been updated to address these outstanding matters and are provided to the Planning Inspectorate at Deadline 1.

9.1.2. The Applicant's response to the points raised by the Environment Agency (EA) is provided in the following table.

Table 9.1: Response to Environment Agency

Reference	Environment Agency Comment	Applicant Response
EA001	We are not listed to be consulted on Requirements 11 surface water drainage and 12 foul water drainage – Alter the wording of the following requirements to include "approved by the relevant planning authority, in consultation with the Environment Agency": Requirement 11 Surface water drainage (1) (3), and Requirement 12 Foul water drainage (1)	Requirement 12(3) (Foul water drainage) of the draft DCO [AS-003] includes the requirement to submit details of the permanent foul water drainage system and management and maintenance plan to the relevant planning authority after consultation with the EA as well as Severn Trent Water. The Applicant considers this requirement to address the request to be listed as a consultee for foul water drainage. The Applicant has updated Requirement 11 (1) and (3) (Surface water drainage) of the draft DCO (submitted at Deadline 1) to include the requirement to consult the details of the permanent surface water drainage systems with the EA. The Applicant considers this update to sufficiently address the request by the E A to be listed as a consultee for this matter.
EA002	We are not listed to be consulted on Requirement 8 Means of enclosure – Alter the wording of the requirement to include "approved by the relevant planning authority, in consultation with the Environment Agency."	The Applicant has updated Requirement 8 (Means of enclosure) of the draft DCO (submitted at Deadline 1), to consult the EA on the details of temporary and permanent means of enclosure. The Applicant considers this update to sufficiently address the request to be listed as a consultee for this matter.
EA003	Work number 4 (electrical connection works for the export and import of electricity from the national electricity networks) is not included as part of Requirement 27 (1) Piling and penetrative foundation design (1) – Include work number 4 (both 4A and 4B) in Requirement 27 (1)	The Applicant notes the request to include Work Nos. 4A and 4B (electrical connection works) in Requirement 27 (Piling and penetrative foundation design) of the draft DCO [AS-003]. Reference should be made to Paragraph 4.3.31 of Chapter 4: The Proposed Development [APP-038] which clarifies that "*No new overhead lines are proposed as part of the works required for the Proposed Development.*" As such there is unlikely to be any need for piled foundations as part of the electrical

Reference	Environment Agency Comment	Applicant Response
		connection works. The Applicant has therefore not included these works within Requirement 27 of the draft DCO.
EA004	We are not listed to be consulted on Requirement 37 Decommissioning. We will not have sight of the Decommissioning Environmental Management Plan (DEMP), if the decision is taken to decommission the development – Alter the wording of the Requirement to include "approved by the relevant planning authority in consultation with the Environment Agency."	Requirement 37 (Decommissioning) of the draft DCO [AS-003] requires the undertaker to consult the EA on the decommissioning environmental management plan. The Applicant considers this update to sufficiently address this request to be listed as a consultee for this matter.
EA005	It is stated [in Chapter 5]: "Any significant groundwater dewatering required will be undertaken in line with the requirements of the Environment Agency …" Dewatering not deemed to be "significant" could be carried out in a way that is not consistent with Environment Agency requirements – Amend the wording to state that all dewatering must be undertaken in line with the requirements of the Environment Agency.	The Applicant notes the request to update Chapter 5 [APP-039] to include this wording however this change has been made in the Outline CEMP and the Outline Water Management Plan (provided in Appendix C of the Outline CEMP) [APP-166] given that this document is secured by requirement and would be relied upon to inform mitigation measures for the final CEMP. Please refer to the Applicant's response to EA007 which also addresses this point.

Reference	Environment Agency Comment	Applicant Response
EA006	Reference to superseded (2001) guidance about piling into contaminated ground [in Appendix 12B] - Update all references to the current version of this guidance: Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention, updated: 31 March 2025.	The Applicant notes the request to update ES Appendix 12B [APP-074] to amend reference to the guidance: *Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention (2025)* however this change has been made in the Outline CEMP and the Outline Water Management Plan (provided in Appendix C of the Outline CEMP) [APP-166] given that this document is secured by requirement and would be relied upon to inform mitigation measures for the final CEMP. Please refer to the Applicant's response to EA007 which also addresses this point.
EA007	In Chapter 13 it states that "The Outline CEMP … sets out procedures for dealing with unexpected soil or groundwater contamination that may be encountered." The information in the oCEMP is an overview of what the procedure will comprise, but doesn't provide sufficient detail – we request the unexpected contamination protocol wording outlined in the additional comments, be included within the oCEMP.	The Outline CEMP (APP-166] sets out an outline of proposed mitigation measures to be adopted during construction to minimise impacts to the environment. In accordance with the Outline CEMP, a final CEMP will be prepared in advance of construction by the appointed Contractor to provide a greater level of detail for the proposed mitigation measures. This requirement is secured by Requirement 16 of the draft DCO [AS-003]. The Applicant has updated the Outline CEMP in Tables 7 and 8 and the Outline Water Management Plan (WMP) in Appendix C of the Outline CEMP to address the key points of concern raised by the EA. This includes: • Updated wording to cover all groundwater dewatering activities "*all groundwater dewatering required will be undertaken in line with the requirements of the Environment Agency under the Water Resources Act 1991 as amended and Environmental Permitting (England and Wales) Regulations 2016"* in Table 8; • Updated Inclusion of reference to "*Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention (2025)."* within Table 7;

Reference	Environment Agency Comment	Applicant Response
		• Updated wording to address the request to provide greater detail with respect to unexpected contamination procedures to be employed during construction within Table 7; • Inclusion of buffer distances for construction areas and facilities to be sited "*at least 10m from the top of bank of watercourses*" within Table 7 and 8 and the Outline WMP in Appendix C; • Inclusion of wording to commit the final CEMP to providing further details on concrete mitigation measures within the Outline WMP; • Updated wording to address the request to provide greater detail with respect to management of wheel washing water during construction within Table 8; • Updated wording to address the request to provide more details in relation to the storage of hazardous substances and refuelling activities within Table 7 and 8 and the Outline WMP; and • Updated wording to include the need for a watching brief during the works to install and remove the cofferdam within Table 8.
EA008	The word "landfill" does not appear [in Appendix 12B], which suggests historic landfill has not been considered in this assessment – consider if disturbance of landfill material could impact WFD groundwater bodies. Provide any mitigation to avoid impacts, if necessary.	The Water Framework Directive (WFD) assessment provided in ES Appendix 12B [APP-074] considers the risk of contamination being encountered during the construction phase more broadly. Whilst the assessment does not specifically refer to landfill material, the Applicant considers the inclusion of unexpected contamination procedures, and the requirement to produce a piling and penetrative foundation design in accordance with guidance for contaminated ground within the Outline CEMP [APP-166] to provide sufficiently robust protocols for mitigating the risk of contamination impacting on WFD groundwater bodies. This will, in turn, be subject to final approval by the local planning authority providing an appropriate safeguard.

Reference	Environment Agency Comment	Applicant Response
EA009	In Table 7 (APP-166) it is stated that following the 2022 ground investigation, recommendations were made to undertake further groundwater and ground gas sampling to inform a more robust risk assessment. It further claims "This work has now been undertaken see ES Volume I Chapter 13 (Application Document Ref 6.2.13)." We were unable to find any reference to this additional sampling in Chapter 13 – update the oCEMP so that it references the correct document.	The Applicant refers to the additional comments section of EA009 of the EA's representation which states: "*We are satisfied with the information presented in APP-081. We understand that the ERM 2025 sampling is not the same as the further additional ground investigation which is referenced in multiple other locations (such as section 13.8.2 of APP-047, and section 13A.7.11 of APP-075). We look forward to seeing the results of the further additional investigations in due course.*" As such the Applicant does not consider any further response to be required.
EA010	Wording not specific enough in identifying how mitigation for eel will be incorporated – wording should be specific to the screening of pumps if this is what it means.	The Applicant would like to note that the environmental permit application for the Proposed Development was submitted in December 2025 following discussions with the permitting team from the EA. It is understood by the Applicant that the permit application is currently undergoing duly made checks. The wording of Requirement 5(5) (Detailed design) of the draft DCO [AS-003], together with the environmental permit obligations, are intended to appropriately control the design of the water abstraction to provide compliance with the Eels (England and Wales) Regulations 2009. The Applicant considers that these measures are sufficient to ensure the protection of eel at all stages of their life cycle.
EA011	Incomplete mitigation for fish and eels – Include within the oCEMP a watching brief that ensures eel in the dredged	Please refer to the Applicant's response to EA007 which addresses this point.

Reference	Environment Agency Comment	Applicant Response
	sediment are rescued and released to safety.	
EA012	Scenarios Related to the Operation of the Proposed Development, regarding the Fire and / or Explosion of Natural gas (O-1) and Hydrogen (O-2), the potential impacts column lists "Firewater run-off reaching areas of unmade ground could contain contaminants which would be potentially harmful to ground and groundwater", however surface water is not listed – surface waters need to be added to the list.	The Applicant acknowledges there is a typographical error in this text which should read 'potentially harmful to surface and groundwater'. The Applicant considers this confirmation provides sufficient assurance, and does not consider the document needs to be updated. The draft DCO includes Requirements 11 and 12 which require the details of surface and foul water drainage systems to be submitted and approved by the planning authority in consultation with the Environment Agency.
EA013	Lack of offset from watercourses for construction areas and facilities such as batch concrete facilities, welfare facilities, car parking and wheel wash areas – It should be made clear that construction areas and facilities will all need to be located at least 10m from the top of bank of watercourses, to be in line with buffer distances best practice. This should be clarified in the oCEMP.	Please refer to the Applicant's response to EA007 which addresses this point.
EA014	Lack of a commitment to refuelling only in specific areas and absence of oil	Please refer to the Applicant's response to EA007 which addresses this point.

Reference	Environment Agency Comment	Applicant Response
	separators for plant and machinery storage areas – Provide a commitment within the oCEMP that refuelling, plant and machinery storage areas will be located at least 10m from the top of bank of watercourses and located on drainage areas including oil separators.	
EA015	Insufficient concrete mitigation measures – provide a commitment within the oCEMP, stating that further details on concrete mitigation measures will be provided in the CEMP.	Please refer to the Applicant's response to EA007 which addresses this point.
EA016	Lack of clarity as to how water will be contained and disposed of from self-contained wheel clean facilities – commit within the oCEMP to providing details within the CEMP regarding the wheel washing facility's water containment and disposal.	Please refer to the Applicant's response to EA007 which addresses this point.
EA017	Statement [in Chapter 12] that there could be "potential water quality monitoring". This lack of certainty regarding a monitoring plan is concerning – water quality monitoring must be committed to within the River Trent.	The Applicant notes that the EA has requested water quality monitoring within the River Trent. As the Applicant has noted throughout the ES, no works are proposed within the River Trent with the exception of the use of the existing berth at Railway Wharf for the delivery of Abnormal Indivisible Loads during the construction phase of the development. It is also noted that the environmental permit obligations are intended to appropriately control the discharge of water to the River Trent. In the

Reference	Environment Agency Comment	Applicant Response
		absence of works taking place within the River Trent together with the obligations of the environmental permit, the Applicant does not consider there to be sufficient justification to require water quality monitoring to be undertaken within the River Trent and has therefore not included this requirement within the ES.
EA018	Insufficient mitigation measures for fuel and chemical storage – within the oCEMP, include the additional mitigation measures stated in the additional comments. Clarify that hazardous materials will only be stored on impermeable surfaces	Please refer to the Applicant's response to EA007 which addresses this point.
EA019	We are not confident sufficient water supply measures have been identified for construction – we would expect a simple options appraisal for supply of water for consumptive uses as contingency for it not being available from Anglian Water.	The Applicant notes that the water supplier for this Site will be Yorkshire Water as opposed to Anglian Water. In the meeting held on 30 September 2025, the Applicant confirmed that the most significant water demand requirements are sufficiently covered by the abstraction licence. The water needs for the construction phase are not yet confirmed but would be clarified as part of the detailed design of the Proposed Development in collaboration with the appointed Contractor. Once the construction phase water needs are confirmed, the Applicant confirms that they will engage with Yorkshire Water to secure the construction phase water supply.
EA020	Findings from [watercourse] surveys lack clarity - Provide further clarity on what assessments were undertaken on	Table 11.5 of Chapter 11: Biodiversity and Nature Conservation [APP-045] confirms where information relating to ecological fields surveys can be found. The Applicant confirms that the results of watercourse verification surveys (as mentioned in the second line of Table 11.5) are

Reference	Environment Agency Comment	Applicant Response
	which waterbodies (including survey extent), when and by whom.	provided in Appendix 11F: Aquatic Ecology Survey Report [APP-071]. The Applicant notes that the explanation of the survey results is provided in the Survey Scope section of Appendix 11F (Paragraphs 1.1.6 to 1.1.13). This is supported by Figure 11F.1 which shows the locations of the watercourses surveyed. Detail relating to who undertook the Modular River Physical (MoRPh) surveys is provided within Paragraph D.3.12 of the Outline Landscape and Biodiversity Management and Enhancement Plan (LBMEP) Report [APP-161]. The watercourses included within this survey are provided within Figure 1: Habitat Baseline Plan provided within the same report. With regards to the comments raised about aquatic plant communities, Appendix 11F [APP-071] provides a full account of the aquatic plant survey work undertaken for the Proposed Development, within which it is stated that a specialist survey was completed in 2020 (for Keadby 3). The need to update this survey was considered by the same ecological team during the water vole survey given that this survey also required the detailed examination of all drains. There was no need to update the aquatic plant survey as the conditions had not changed and the previous survey had already identified drains of conservation importance, the value of which would not have changed in such a 4-year period in the absence of adverse pressures (i.e. these drains are reported as remaining of county value). Drains recorded as having lower value in 2020 remained so for the reasons identified in the Field Survey Results from Paragraph 1.4.9 onwards (i.e. poor habitat quality from heavy shading, shallow water depth, and/or dominance by common reed). Detailed accounts are provided for all the relevant drains in Section 1.4: Results. The Applicant also notes that Government guidance on the Natural Environment states that "*ecological survey will be necessary in*

Reference	Environment Agency Comment	Applicant Response
		advance of a planning application if the type and location of development could have a significant impact on biodiversity and existing information is lacking or inadequate." No significant impacts on watercourses are reported given the impact avoidance and mitigation measures identified and committed to and informed by adequate baseline data. Notwithstanding the points above, the Applicant also notes that further survey work is secured by Requirement 16 (Construction Environment Management Plan) of the draft DCO [AS-003] so any surveys considered to require an update at the point of construction, would be updated as part of the pre-commencement Requirements.
EA021	Lack of Mink control / eradication measures - Commit to including Mink control/eradication measures within the Outline Landscape and Biodiversity Management and Enhancement Plan, or the Invasive Species Management Plan within the final CEMP	The Applicant notes the recommendation for inclusion of mink control / eradication measures as part of the Invasive Species Management Plan within the final CEMP. Requirement 16(2(a)) of the draft DCO [AS-003] commits to the development of an invasive species management plan as part of the final CEMP, in consultation with the EA and Natural England. The existing Requirement is considered sufficient for securing further development of mitigation measures, nonetheless the Applicant considers that mink control / eradication measures can be considered as part of the development of this plan and would welcome discussions with the Environment Agency at this stage.

10. Response to E-Plane Ltd

10.1.1. The RR provided by E-Plane Ltd [RR-007] is as follows:

"E-Plane Ltd owns Sandtoft Aerodrome, which is within the 5km impact zone. Winds in the UK are normally North Westerly, which means that runway 23 is the preferred landing runway. Projecting a line from the runway to the proposed site indicates that a poor weather approach would need to route over the site. The questions that then arise are - what is the maximum stack height and location, is there likely to be a restriction on overflying aircraft, and has the potential impact on safe flight been considered? I could not find it in any of the studies so far."

10.1.2. The Applicant acknowledges the queries raised by E-Plane Ltd and references Table 4.1 contained within ES Chapter 4: The Proposed Development [APP-038] which sets out the maximum design parameters for the Proposed Development. The maximum stack height is given as 85m above ground level (AGL) or 88m Above Ordnance Datum (AOD).

10.1.3. The location of the stack will be within the Main Site (Work No. 1) which is shown on Figure 3.3: Indicative Parts of the Site Plan [APP-095] and the Works Plans [AS-005].

10.1.4. The Applicant refers E-Plane Ltd to ES Chapter 2: Assessment Methodology [APP-036] paragraphs 2.1.8 to 2.1.15 which set out the consultation undertaken with the Civil Aviation Authority, NATS and the MoD Defence Infrastructure Organisation in relation to the Proposed Development. In addition, as noted in paragraph 2.1.13 of Chapter 2, Sandtoft Airport was consulted on the Proposed Development and confirmed that there would be no impact on the airfield. The Applicant confirms that as the stack falls below the threshold of 91.4m Above Ground Level there will be no restriction on overflying aircraft. Related guidance provided to the Applicant by the CAA has been taken into account within the Requirements of the draft DCO [AS-003].

11. Response to Fisher German LLP on behalf of National Gas Transmission Limited

11.1.1. The RR (RR-014) provided on behalf of National Gas Transmission Plc (NGT) is as follows:

"*This relevant representation is submitted on behalf of NGT Gas Plc ("NGT") in respect of the The Keadby Next Generation Power Station Project DCO, and in particular NGT's infrastructure and land which is within or in close proximity to the proposed Order Limits.*

NGT will require appropriate protection for retained apparatus including compliance with relevant standards for works proposed within close proximity of its apparatus.

NGT's rights of access to inspect, maintain, renew and repair such apparatus must also be maintained at all times and access to inspect and maintain such apparatus must not be restricted. Further, where the Applicant intends to acquire land or rights, or interfere with any of NGT's interests in land or NGT's apparatus, NGT will require appropriate protection and further discussion is required on the impact to its apparatus and rights. Further detail is set out below.

NGT have infrastructure within the proposed Order Limits. The transmission pipeline forms an essential part of the gas transmission network in England, Wales and Scotland. NGT owns or operates the following infrastructure within the proposed Order Limits for the Project:

Transmission Pipelines: Feeder 7 – Eastoft to Keadby PS

Protection of NGT Assets

As a responsible statutory undertaker, NGT's primary concern is to meet its statutory obligations and ensure that any development does not impact in any adverse way upon those statutory obligations. As such, NGT has a duty to protect its position in relation to infrastructure and land which is within or in close proximity to the draft Order Limits.

As noted, NGT's rights to retain its apparatus in situ and rights of access to inspect, maintain, renew and repair such apparatus located within or in close proximity to the Order Limits should be maintained at all times and access to inspect and maintain such apparatus must not be restricted.

NGT will require protective provisions to be included within the draft Development Consent Order (the "Order") for the Project to ensure that its interests are adequately protected and to ensure compliance with relevant safety standards. NGT is liaising with the Applicant in relation to such protective provisions, along with any supplementary agreements which may be required.

NGT requests that the Applicant continues to engage with it to provide explanation and reassurances as to how the Applicant's works pursuant to the Order (if made) will ensure protection for those NGT assets which will remain in situ, along with facilitating all future access and other rights as are necessary to allow NGT to properly discharge its statutory obligations.

NGT will continue to liaise with the Applicant in this regard with a view to concluding matters as soon as possible during the DCO Examination and will keep the Examining Authority updated in relation to these discussions.

Compulsory Acquisition Powers in respect of the Project As noted, where the Applicant intends to acquire land or rights, or interfere with any of NGT's interests in land, NGT will require further discussion with the Applicant.

NGT reserves the right to make further representations as part of the Examination process in relation to specific interactions with its assets but in the meantime will continue to liaise with the Applicant with a view to reaching a satisfactory agreement."

11.1.2. The Applicant is in ongoing discussions with NGT regarding the protective provisions included in Part 2, Schedule 9 of the draft DCO [AS-003]. These provisions provide NGT with significant protections in relation to the carrying out of the Proposed Development. For example, paragraph 19 of Schedule 9 maintains NGT's rights of access to maintain apparatus in temporarily stopped up, diverted or altered streets. Paragraph 21 prevents the compulsory acquisition of NGT's interests without it's agreement. Paragraph 22 requires alternative apparatus to be installed before any existing NGT apparatus is removed and paragraph 24 provides a procedure for the protection of existing NGT apparatus that is to be retained which requires the undertaker to submit information about the proposed works to NGT at least 56 days in advance, with approval by NGT required before those works commence.

11.1.3. The Applicant will continue to engage with NGT to agree the protective provisions prior to the close of the Examination. In line with Government Guidance "*Guidance on the content of a Development Consent Order required for a Nationally Significant Infrastructure Project"*, the Applicant is

seeking to ensure that the protective provisions accurately reflect the Proposed Development.

12. Response to Historic England (HBMCE)

12.1.1. The RR provided by Historic England [RR-008] is as follows:

"Historic England The Historic Buildings and Monuments Commission for England (HBMCE) is better known as Historic England, and we are the Government's adviser on all aspects of the historic environment in England, including historic buildings and areas, archaeology and historic landscapes. We have a duty to promote conservation, public understanding and enjoyment of the historic environment. We are an executive Non-Departmental public body and we answer to Parliament through the Secretary of State for Culture, Media and Sport (DCMS).

Proposal Keadby Next Generation is a combined cycle gas turbine electricity generating station designed to run on 100% hydrogen and able to run on 100% natural gas of up to 910 megawatts net electrical output. The application is for the generating station and associated connections and works.

Representation We engaged in positive pre-application discussion with the applicant and have provided brief comments on the Preliminary Environmental Impact Report at S42 stage, where we confirmed our comments at Scoping had been largely addressed, we referred the applicant to the expertise of the Local Authority Archaeological Officer. We note the submission of a heritage impact assessment and Outline Written Scheme of Investigation. We look forwards to further constructive engagement with the applicant through a Statement of Common Ground where necessary. As a Statutory Consultee we will be happy to address any questions the ExA may have in respect of heritage matters. We can also continue to offer technical advice as appropriate to the applicant and local authority archaeological officer through our science advisor."

12.1.2. The Applicant acknowledges the response from Historic England and would like to take the opportunity to thank them for their inputs in the pre-application stage. No further response is considered to be required at this stage.

13. Response to Isle of Axholme & North Nottinghamshire Water Level Management Board

13.1.1. The RR provided by the Isle of Axholme and North Nottinghamshire Water Level Management Board [RR-009] is as follows:

"With regard to the request for consultation response regarding the above project I would advise that the proposed development crosses areas under the control of The Isle of Axholme and North Nottinghamshire Water Level Management Board. I can confirm that some early stage discussions have taken place with the applicant. There are numerous watercourses that are likely to be impacted by the development, principally by the proposed route of any cables but also potentially above ground installations and accommodation works. I feel that it is important to raise some specific issues that will need to be considered further and in detail as a part of the DCO process.

All Board watercourses are subject to Byelaws, which are intended to protect the watercourses and the Board's ability to maintain them. With this in mind I would advise the following.

Byelaw Number 3 states that:

No person shall as a result of development (within the meaning of section 55 of the Town and Country Planning Act 1990 as amended ("the 1990 Act")) (whether or not such development is authorised by the 1990 Act or any regulation or order whatsoever or none of them) for any purpose by means of any channel, siphon, pipeline or sluice or by any other means whatsoever introduce any water into any watercourse in the District so as to directly or indirectly increase the flow or volume of water in any watercourse in the District (without the previous consent of the Board)."

Consent will only be granted for the increase in flow to a watercourse where the Board is happy that in doing so no demonstrable harm will be caused. It may be the case that appropriate mitigations are required to be put in place to either attenuate flow or to enhance the existing watercourse to ensure no detriment. If this is not possible alternative outfall locations may need to be considered.

Byelaw Number 10 states that:

No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within nine metres of the landward toe of the bank where there is an embankment or wall or within nine metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within nine metres of the enclosing structure.

This will relate primarily to any above ground installations and their proximity to any Board maintained watercourses.

Byelaw number 17 states that:

No person shall without the previous consent of the Board -

(a) place or affix or cause or permit to be placed or affixed any gas or water main or any pipe or appliance whatsoever or any electrical main or cable or wire in, under or over any watercourse or in, over or through any bank of any watercourse;

(b) cut, pare, damage or remove or cause or permit to be cut, pared, damaged or removed any turf forming part of any bank of any watercourse, or dig for or remove or cause or permit to be dug for or removed any stone, gravel, clay, earth, timber or other material whatsoever forming part of any bank of any watercourse or do or cause or permit to be done anything in, to or upon such bank or any land adjoining such bank of such a nature as to cause damage to or endanger the stability of the bank;

(c) make or cut or cause or permit to be made or cut any excavation or any tunnel or any drain, culvert or other passage for water in, into or out of any watercourse or in or through any bank of any watercourse;

(d) erect or construct or cause or permit to be erected or constructed any fence, post, pylon, wall, wharf, jetty, pier, quay, bridge, loading stage, piling, groyne, revetment or any other building or structure whatsoever in, over or across any watercourse or in or on any bank thereof;

(e) place or fix or cause or permit to be placed or fixed any engine or mechanical contrivance whatsoever in, under or over any watercourse or in, over or on any bank of any watercourse in such a manner or for such length of time as to cause damage to the watercourse or banks thereof or obstruct the flow of water in, into or out of such watercourse.

Provided that this Byelaw shall not apply to any temporary work executed in an emergency but a person executing any work so excepted shall, as soon as practicable, inform the Board in writing of the execution and of the circumstances in which it was executed and comply with any reasonable directions the Board may give with regard thereto.

The Board will require all watercourses to be crossed by means of an appropriate trenchless method at a depth no less than 2 metres PLUS the safe working distance below the hard bed level of all watercourses (to ODN if EA or IDB maintained). The purpose of this requirement is to allow the IDB to maintain and have the flexibility to improve watercourses in the future due to climate change (works will include deepening & widening of watercourses).

Any culverting or other works within the bed of any Board maintained watercourse be they temporary or permanent will require consent. It will usually be assumed that these structures will be temporary measures to accommodate haul roads etc.

It is anticipated that the above requirements would be covered by SOCGs, MOU, and via Protective Provisions within the DCO. This matter should be discussed further and in more detail as the proposed route is refined.

Any culverting or other works within the bed of any riparian watercourse within the Board's district or extended area, be they temporary or permanent will also require consent.

It should be noted that the Board's consent is required irrespective of any permission gained under the Town and Country Planning Act 1990. The Board's consent will only be granted where proposals are not detrimental to the flow or stability of the watercourse/ culvert or the Board's machinery access to the watercourse/ culvert which is required for annual maintenance, periodic improvement and emergency works. The Board would not look to be disapplying these powers unless they have been suitably agreed and covered within the protected provisions embedded within the DCO.

I hope that the above is of assistance and I look forward to further ongoing detailed discussions with regard to the proposal."

13.1.2. The Applicant's response to the Isle of Axholme and North Nottinghamshire Water Level Management Board's RR is set out below.

13.1.3. The Applicant acknowledges the Board's statutory powers conferred on it by virtue of the byelaws dated 29 June 2018 pursuant to section 66 of the Land Drainage Act 1991, and the Board's request for its interests to be protected by way of protective provisions under the DCO. The Applicant considers that protective provisions are not necessary for the Board in the context of the proposed development as Article 8 (application and modification of statutory provisions) of the draft DCO [AS-003] does not disapply or modify the position of any byelaws enacted under section 66 of the Land Drainage Act 1991. Any powers or rights granted to the Board under these byelaws continue to apply and provide the necessary and required regulatory framework to protect the Board's interests in it undertaking its statutory functions. Furthermore, in respect of drainage works, Article 21 (maintenance of drainage works) of the draft DCO sets out that nothing in the DCO (including the construction, operation or maintenance of the proposed development) shall affect any responsibility or maintenance of any works connected with the drainage of land unless otherwise agreed between the Applicant and the responsible person (including the Board).

13.1.4. The established approach with Nationally Significant Infrastructure projects (NSIPs) is that protective provisions are usually only granted under the DCO where an existing statutory or regulatory regime is disapplied or modified by the DCO, and where such provisions are necessary to compensate for any gaps in the legal rights created by such disapplication. Where statutory controls and byelaws remain in force (such as in this situation where the Board retains its powers under the relevant byelaws), the precedented approach has been to rely on those existing frameworks rather than to introduce parallel controls through the DCO.

13.1.5. In light of the above points, the Applicant considers that protective provisions are not necessary in this instance as there is no gap in the legal protections afforded to the Board which threatens its ability to carry out its duties. To the contrary, the inclusion of such protective provisions could create overlapping, duplicative consent procedures, unnecessary delay, operational uncertainty, and added costs to the implementation of the Proposed Development.

13.1.6. The Applicant is open to further engagement with the Board should any regulatory gap be identified, that cannot be addressed through existing statutory controls which would be materially impacted by the Proposed Development. The Applicant will liaise with the Board further to determine

if the Board's preferred approach would be for the DCO to disapply the byelaws and include protective provisions.

13.1.7. The Applicant confirms that provisions in the Outline CEMP [APP-166] provide the relevant and appropriate controls to ensure prior authorisation of activities proximal to watercourses is in place (refer to paragraph C.3.5) along with adherence to relevant IDB byelaws (refer to paragraph C.4.3). The Outline CEMP also includes provisions for water quality monitoring during construction to be developed in consultation with the Board, prior consent for any works affecting or crossing drains within the Electrical Connection to the Northern Powergrid Substation (Work No. 4A) and emergency vehicle access route (Work No. 8D) along with mitigation measures related to pollution prevention and control of discharge. Requirement 16 of the draft DCO [AS-003] secures the development of a CEMP (in accordance with the Outline CEMP) prior to commencement of the Proposed Development.

13.1.8. The Applicant also confirms that the draft DCO [AS-003] secures by Requirements 11(3) (Surface water drainage),13(1) (Flood risk mitigation) the need to submit details of the permanent surface water drainage systems and a scheme for the mitigation of flood risk during operation to the relevant planning authority for approval in consultation with the relevant IDB. In addition, Requirement 17(3) (Discharge of water) secures the need to seek consent from the owner of the waterbody prior to any discharge of water.

13.1.9. The Applicant considers that the inclusion of the Board as a consultee for the detailed design of surface water drainage and flood risk, and for the development of mitigation measures and controls within the CEMP, provides appropriate controls to the Board to safeguard the watercourses for which the Board is responsible.

14. Response to James Hewitt

14.1.1. The RR provided by James Hewitt [RR-010] is as follows:

"*Relevant Representation concerning the Keadby Next Generation Power Station Project Submitted independently by James Hewitt.*

§1 The Applicant, in its document 6.2.18 Environmental Statement Volume I: Chapter 18 Climate Change Rev 0, includes a section under the heading "International Law". That document is more recent than the Advisory Opinion of the International Court of Justice concerning Obligations of States in respect of Climate Change (23 July 2025).

§2 As such, the Applicant appears to have chosen to ignore that opinion (and the probability that future legislation will prohibit internationally wrongful acts such as the project's operation). Doing so would imply willingness to accept the consequences of proceeding - without recourse to litigation under the Energy Charter Treaty, investor-state dispute settlement procedures and the like. This would be relevant if and when government obliges changes to be made to the project and those changes substantially reduce the profits which the Applicant claims to have anticipated.

§3 The Applicant refers to this project as "Next Generation", which implies having sero associated greenhouse gas emissions. However, in itself, the project is nothing like that. Also, the project's purported aim seems inconsistent with the clear and urgent imperative of transforming the UK economy into one which is peaceful, equitable and commensurate with halting the emergencies attributable to anthropogenic greenhouse gas emissions, biodiversity loss and pollution (especially of plastics).

§4 For the foreseeable future (beyond the life of the project as currently proposed by the Applicant) such green hydrogen as is produced in the UK is likely to be reserved for uses other than displacing methane in the national grid and/or in power stations supplying the national grid. The energy cost of producing green hydrogen and then burning it to supply energy is likely to remain greater than supplying green electricity directly or charging battery electric vehicles. Imports of green hydrogen from countries seeking to industrialse are implicitly unlikely. Its cost combined with the cost of transportation and associated losses of hydrogen en route make imports from other countries unlikely (and prices would probably be prohibitive for electricity generation).

§5 Producing blue hydrogen for such usage would also unwarranted. Reasons include its requirement for continued production of fossil fuel, the underperformance of post-combustion carbon capture world-wide, the amount of energy required to operate the capture process, and the

prohibitive consequences of leaks from the site where the captured carbon dioxide is to be permanently disposed of in geological strata. The amount of carbon dioxide emitted in the UK but not captured - from entry to the power station to the permanent disposal site - is likely to be more than the maximum anticipated in the UK's decarbonisation plans (twice rejected by courts).

§6 That amount would also be several times greater than the amount (5%) which would, implausibly yet by convention, be proposed by the Applicant if the project were to include a facility to capture 95% of the power station's post-combustion carbon dioxide. Clause 30 of the draft DCO commits to nothing more than setting aside sufficient land to accommodate such a capture facility and associated works.

§7 In the context of the blue hydrogen variant proposed, the Applicant does not take into account the crucial downstream components of the post-combustion carbon facility. In the unlikely event that the Secretary of State is minded to grant a DCO for the project, that approval should include "Grampian" conditions which ensure that no works (or compulsory purchase) should take place unless and until full approval has been granted for those downstream components – including compression, decontamination, onshore and offshore transportation, and permanent geological disposal.

§8 The quantity of gaseous methane ("natural" gas) remaining unexploited and accessible in the UK (and Norway, by far the UK's leading supplier) is rapidly dwindling while imports of LNG (liquified natural gas) are rising. In terms of carbon dioxide equivalence, the upstream greenhouse gas emissions of producing methane, liquifying it, transporting it, and converting it back to gaseous form are likely to be more than double the amount of carbon dioxide which would be emitted by combustion at the proposed power station if this were unabated.

§9 From time 14:20.47 on Tuesday the 25th of November 2025 in the House of Commons, on Parliament TV, the former Secretary of State at DESNZ indicates that the greenhouse gas emissions of using LNG are four times greater than if gaseous methane (from the North Sea) were used. What she said presumably reflects the 20-year global warming potential ("GWP") of methane leaks during production by fracking in the USA (the UK's leading supplier). The 20-year GWP is obviously relevant (not the 100-year GWP) - because the UK's share of the global carbon budget for "well below 2°C" will have been exhausted well before 2050. Greenhouse gas emissions are continuing to increase, rather than steeply decline, and their impact is even more catastrophic than anticipated under the UNFCCC's Paris Agreement of 2015. Reputable current estimates indicate that, to meet that budget, the UK should plan to have fully decarbonised by 2039 – less than 20 years from now.

§10 Item 1 of the Executive Summary of the Applicant's document 7.2 Hydrogen Connection Statement Rev 0 seems to anticipate the objections raised above in relation to the (perhaps diversionary) proposals concerning hydrogen. As an alternative, the Applicant offers to establish an unabated power station fired with a blend of methane and an unspecified amount of hydrogen instead. That amount of hydrogen is likely to be tiny, given its cost and far superior alternative uses. Proceeding would be inconsistent with government policy to decarbonise electricity generation by 2030.

§11 In conclusion, this Application should be rejected."

14.1.2. The Applicant's response to Mr Hewitt's RR is set out below.

14.1.3. Mr Hewitt draws inferences from the project title ("Next Generation") that have not been suggested by the Applicant.

14.1.4. Mr Hewitt's comments on the cost of producing green hydrogen and that UK-produced green hydrogen is likely to be used for purposes other than electricity generation, ignore one of the stated purposes of the Proposed Development, related to helping to stimulate the UK's hydrogen economy (in line with Government policy). A larger hydrogen economy would lead to greater supply and reduced costs. The comments are therefore considered to reflect Mr Hewitt's view of the current hydrogen supply situation, not the anticipated future situation. The GHG assessment assumes that all hydrogen that would be supplied to the Proposed Development will meet the Low Carbon Hydrogen Standard (LCHS); if the proportion of green hydrogen in the hydrogen supply was to increase the GHG emissions would be lower than assessed.

14.1.5. Mr Hewitt's comments on blue hydrogen and the performance of carbon capture systems worldwide are not considered to be material to this proposal. The Proposed Development does not include the production of hydrogen and the performance of other carbon capture systems is not material to the decision on this Application. Carbon Capture Usage and Storage (CCUS) is a key part of the UK's energy strategy and is low carbon infrastructure for which there is an urgent need, as confirmed by the Overarching National Policy Statement (NPS) for Energy (EN-1). The use of the LCHS to inform the GHG assessment is considered to be a robust approach.

14.1.6. The Applicant rejects Mr Hewitt's assertion that the reference to the use of hydrogen fuel is "perhaps diversionary". NPS EN-1 (paragraph 2.5.6) in referring to the British Energy Security Strategy, confirms that the acceleration of the deployment of technologies such as hydrogen is critical to ensuring a domestic supply of clean, affordable and secure power as

we transition to net zero. Furthermore, paragraph 3.2.6 of NPS EN-1 states that there is a need for all of the types of energy infrastructure covered by the NPS, including hydrogen infrastructure, and that need is urgent and that (paragraph 3.2.10) substantial weight should be given to that need in decision making. Hydrogen-fired electricity generation is considered specifically at paragraphs 3.3.49 to 3.3.50 of NPS EN-1. Paragraph 3.3.49 of EN-1 states that low carbon hydrogen could be capable of replicating the role of natural gas in the electricity system, including providing both firm, flexible capacity in the future and a decarbonisation route for unabated combustion plants. It also refers to the Government's ambition of 10 gigawatts (GW) (set out in the UK Hydrogen Strategy) of low carbon hydrogen production capacity by 2030. As such, there is clear policy support for hydrogen-fired electricity generation and hydrogen infrastructure underlined by the Government's ambition for 10 GW of low carbon hydrogen production by 2030. Indeed, the need for such low carbon infrastructure is confirmed to be a critical national priority (paragraph 3.3.62 of EN-1).

14.1.7. Notwithstanding the above, paragraph 3.3.48 of NPS EN-1 notes that although the expectation is that low carbon alternatives will be able to replicate the role of natural gas in the electricity system over time, some natural gas-fired generation without CCS, running infrequently, may still be needed for affordable reliability even in 2050. Paragraphs 3.3.57 to 3.3.61 confirm that there is an urgent need for all the generating technologies mentioned in EN-1, including natural gas with or without CCS to provide security of supply and an affordable and reliable electricity system.

14.1.8. Regarding Mr Hewitt's comments about the carbon intensity of imported liquefied natural gas (LNG) relative to those of gas production in the UK continental shelf, the upstream carbon impact of the natural gas supply chain in its entirety has been reflected via the official UK Government emissions factor applied within the greenhouse gas assessment for the Proposed Development. This emissions factor already takes account of the varying proportions of imported LNG in the gas grid. Looking further ahead, there is no reliable way to project the relative proportion of LNG or other sources of imported gas into the UK; furthermore, there is a range of international initiatives explicitly aimed at reducing global emissions of methane, including from the energy sector. The use of the UK Government's WTT emissions factor for natural gas in the GHG assessment for the Net Zero Teesside Project has been accepted by both the Examining Authority in their Recommendation Report and the Secretary of State for Energy Security and Net Zero in her Decision Letter.

14.1.9. Mr Hewitt's assertion that the "amount of hydrogen is likely to be tiny, given its cost and far superior alternative uses" again is considered to reflect a view of the status quo, not the economic conditions for hydrogen

production that the Proposed Development will help to create. As confirmed above, the Government has a clear ambition to deliver low carbon hydrogen production at scale (10 GW) by 2030 and is putting in place mechanisms to support this.

14.1.10. The RR makes reference to the International Court of Justice's 23 July 2025 advisory opinion. The relevant legal framework, which is established principally by the Climate Change Act 2008, has been considered by the Applicant and is as set out in the application documents, including the Planning Statement [AS-010] and Chapters 7 (Legislative Context and Planning Policy) and 18 (Climate Change) of the Environmental Statement [APP-041 and APP-052].

14.1.11. Please see further the Applicant's response to the RR from CESL above.

15. Response to Leeds City Council

15.1.1. The RR provided by Leeds City Council [RR-011] is as follows:

"The proposed development is supported in principle for its ability to positively address climate change. The site is geographically set well away from the Leeds administrative district so there are unlikely to be any direct adverse effects on our population or environment. Detailed planning considerations, together with any require mitigations, should be considered and agreed with the Host Authority and the direct Neighbouring Authorities."

15.1.2. The Applicant notes the representations provided by Leeds City Council and agrees that there are unlikely to be any direct adverse effects on the Leeds population or environment.

16. Response to Lincolnshire Wildlife Trust

16.1.1. The RR provided by Lincolnshire Wildlife Trust [RR-012] is as follows:

"Proposed Development: construction, operation and maintenance of a combined gas turbine (CCGT) generating station with a capacity of up to 910 MW.

Lincolnshire Wildlife Trust [The Trust, hereafter] is a conservation charity in the county with a strategic remit to support conservation of the natural world, lead on the recovery of key habitats and species, and empower local communities to take action for nature. The Trust is supported by over 27,000 members across Lincolnshire.

The Trust made representation to the applicant in February 2025 in response to the statutory consultation. We identified ourselves as an interested party, and highlighted concerns over the lack detailed mitigations to account for habitat impacts, interaction with Local Wildlife Sites, the level of impacts to water voles and associated development of the water vole mitigation strategy. The Trust also extended a request for further engagement and sight of technical ecological documentation and proposals, which was not enacted by the applicant, and would have allowed for the development of a statement of common ground for key issues.

We note and have reviewed the new Landscape and Biodiversity Management and Enhancement Plan Report [LBMEP] submitted within the examination library. Particular points of concern and relevance to The Trust include; i. The importance of water voles in this locality should not be understated, in terms of persistence, with records from 1979 onwards, and the volume of sightings with 239 sightings registered on the LERC system. The drainage network attracting LWS status provides a broad mosaic of interconnected habitat in variable conditions. We retain concerns that the development could impact this local population, triggering key water vole sensitivities in terms of tolerance to disturbance, direct loss of habitat and avoidance of fragmented /disturbed habitat. We note and acknowledge the proposal to develop an avoidance and mitigation strategy, and The Trust wishes to make further representations to ensure that this strategy is sufficiently robust and resilient as it is developed, to mitigate for these impacts and provide additionality through measures such as riparian habitat enhancement where appropriate.

ii. We welcome new details provided by the applicant in the LBMEP on habitat impacts and habitat reinstatement, with this information raising the following points of concern and clarification;

a. In consideration of 4.11.5 we do not consider that the proposed extension of the haulage road lifespan carried over from Keady 2 Power station should be accepted without further discussion or clarification. This appears to represent as a net loss in localised habitat provision for the duration of the construction programme, and therefore we question the rationale provided in 4.11.6 that it should be considered as no change within the BNG assessment.

b. We query the applicants contingency proposals for over-runs or habitats not returning to their baseline state within two years, with consideration of Trust Officers recent experience with comparable developments not meeting these targets.

c. Noting the divergence from the BNG metric and desk rules, as per D 6.1 The Trust requests a copy of the populated BNG metric to review the assumptions and modelling presented throughout section D6. We request the opportunity to review and submit further supplementary responses if necessary.

If you have any queries regarding the above, please do not hesitate to contact me. Yours sincerely

Dr James Wood Lincolnshire Wildlife Trust."

16.1.2. The Applicant's response to Lincolnshire Wildlife Trust's RR is set out below.

16.1.3. The Applicant acknowledges the outstanding concerns raised by Lincolnshire Wildlife Trust (LWT). The Applicant would like to provide the following information in response to these concerns.

Water vole

16.1.4. The Applicant recognises the importance of water vole as a constraint requiring mitigation and allowance for ongoing surveys and pre-commencement planning to ensure this species is appropriately addressed at that time based on the species status at that time.

16.1.5. The potential impact on water vole habitat remains unchanged from the consented Keadby 3 DCO, and the Applicant wishes to emphasise that the Proposed Development represents an alternative to that consented development.

16.1.6. The Applicant notes that the water vole report provided as ES Appendix 11E: Riparian Mammal Survey Report [APP-070] has been heavily redacted such that the relevant information will not have been available to LWT for review. The Applicant considers this redacted contextual

information to be highly relevant to LWT's comments. The key points of relevance are:

- Drain 1 (Glew Drain) will remain accessible and will continue to connect optimal water vole habitats (drains with water and aquatic vegetation). The emergency access will be via a single span bridge without a culvert.
- Drain 2. The section to be culverted does not reliably hold water. It does not connect to a wider network of water vole habitat through the Site. The water vole evidence is consistent with one water vole (peak of 8 latrines) and located outside the section to be culverted where enhancement works are proposed.
- Drain 4. The section to be infilled does not reliably hold water. It does not connect to a wider network of water vole habitat through the Site. The water vole evidence is consistent with one water vole (peak of 3 latrines).
- Drain A. This is an isolated ditch sustained by surface water runoff from adjacent hardstanding. It does not provide connections to other habitats. The water vole evidence is consistent with one water vole (peak of 8 latrines and 2 burrows) and located outside the section to be culverted where enhancement works are proposed.
- Noting the above, the Proposed Development has potential (based on the baseline data) to affect 2 water voles through loss of sub-optimal habitat.

Local Wildlife Sites (LWSs).

16.1.7. Chapter 11: Biodiversity and Nature Conservation [APP-045] of the ES identifies and screens all LWSs within the worst-case potential zone of influence of the Proposed Development. The Chapter also addresses undesignated habitats of LWS quality (the former Keadby Ash Tip).

16.1.8. LWT is also advised, as stated within ES Chapter 11 [APP-045], that the ecological impact assessment has been informed by and responds to the specialist assessments and conclusions of other chapters dealing with the physical environment i.e. ES Chapter 8: Air Quality [APP- 042] and ES Chapter 12: Water Environment [APP-046]. The zone of influence was defined within these chapters with reference to the requirements of good practice e.g. the air quality impact assessment considers all LWSs within 2km in accordance with the relevant good practice requirements. The assessment in ES Chapter 12 identifies relevant waterbodies and therefore the drainage network subject to LWS designations for aquatic habitats i.e. the drainage networks referenced by LWT.

16.1.9. Two LWS (Stainforth and Keadby Canal Corridor LWS and Hatfield Waste Drain LWS) have relevance to the assessment of construction impacts and effects and are assessed within the Chapter 11 [APP-045]. This clarifies that there would be no significant effects on Hatfield Waste Drain LWS as the only construction works relate to like for like replacement of the existing bridge. The assessment also considers the impact on the

Stainforth and Keadby Canal Corridor LWS as this is the proposed cooling water supply. The footprint of the Canal Water Abstraction structure is primarily on the banks of the canal which is not part of the designation. The works within the LWS are negligible and do not affect any stands of vegetation for which the LWS is designated. Consequently, no significant effects are predicted.

16.1.10. A broader suite of LWS have relevance to operation. No significant effects are predicted from emissions to air. Use of the canal as the water supply will also not result in significant effects. The Canal and River Trust are satisfied that the water levels in the canal can sustain the level of abstraction proposed, and this abstraction has already been consented under the Keadby 3 DCO and is otherwise subject to Environment Agency permitting regimes that require no environmental harm.

Mitigation

16.1.11. The mitigation provisions are set out in multiple documents, which form part of the Application, including the Outline Landscape and Biodiversity Management and Enhancement Plan (LBMEP) Report [APP-161], the Outline Construction Environmental Management Plan (CEMP) [APP-166] and the draft DCO [AS-003].

16.1.12. The Applicant emphasises that the detailed design would be undertaken post-determination and that relevant constraints could change in the lead into construction. Therefore, it is essential that impact avoidance options and mitigation be kept under review. A balance is therefore sought between demonstrating firm commitments and intent but not setting rigid proposals that may not be appropriate post-determination. The details are presented as 'Outline' but establish a robust framework (consistent with the Keadby 3 development) for the post-determination approach. This framework will be specified in more detail at that time. This is secured by Requirement 6 (LBMEP) and Requirement 16 (CEMP) of the draft DCO [AS—003]. North Lincolnshire Council will be responsible for reviewing and approving the final specifications post-determination in accordance with the requirements. Statutory stakeholders will also be involved at that time as appropriate, and through the parallel permitting regimes.

16.1.13. Committed mitigation for impacts on the physical environment are covered within ES Chapter 8: Air Quality [APP-042] and ES Chapter 12: Water Environment [APP-046]. These committed measures preclude pathways for water and air quality impacts on biodiversity and as they are not biodiversity-specific measures they do not need to be specified within ES Chapter 11: Biodiversity and Nature Conservation [APP-045].

16.1.14. ES Chapter 11 [APP-045] provides an account of the committed development design and impact avoidance measures i.e. how the development will be designed and implemented to avoid or minimise potential impacts and effects. This includes details of stand-offs, ECoW, pre-construction update surveys, outline mitigation strategies for protected species strategies, and provisions for Invasive Non-Native Species (INNS). Comparable information is provided within the Outline LBMEP.

Habitat Reinstatement through the LBMEP/BNG.

16.1.15. The habitat baseline has been defined in accordance with current practice i.e. it is the habitat baseline at the point of application. There are no current proposals to remove the existing haul road, this is already permitted to be used for construction of the consented Keadby 3 Power Station, for which the Proposed Development is an alternative. The Applicant does not wish to present an Outline LBMEP that implies a benefit from removal of the haul road after construction of the Proposed Development. Similarly, the original loss of habitat to the haul road was not a consequence of the Proposed Development and there is no pre-existing BNG commitment in relation to the haul road. Hence, its treatment in the BNG assessment as a situation of no change. However, the Applicant has otherwise made a clear commitment to remove the haul road and to reinstate this land to an appropriate condition.

17. Response to Natural England

17.1.1. The Applicant acknowledges the outstanding concerns raised by Natural England and would like to note that the Applicant has met with Natural England to discuss these matters. The Applicant and Natural England are agreed on next steps, and the Applicant is updating the relevant documents, including the Habitat Regulations Assessment (HRA) [APP-153]) to provide the additional clarifications needed or to address the technical points raised.

17.1.2. The Applicant's response to the points raised by Natural England in its RR [RR-013] are provided in the following table.

Table 17.1: Response to Natural England

Reference	Natural England Comment	Applicant Response
NE1	Natural England notes the inclusion of noise contour maps in the updated Habitats Regulations Assessment (HRA). The contour maps demonstrate that a small area of the field to the north of the redline boundary will experience noise levels of 60db (figure 3) due to construction piling, with the noise level dissipating beyond this to 55db. The area which will experience 60db encompasses the site of Keadby wind turbines and is therefore less likely to be suitable to support SPA birds. However, the maps are based on noise levels calculated using the LAeq measure, and therefore this does not demonstrate potential impacts from loud bangs which can be more disturbing to birds than constant noise. We also note that the significance criteria outlined in 5.2.11 uses the LAmax figures. We advise LAmax figures should be provided for the construction activities with the most significant noise inputs, along with contour maps where there is potential for attenuation beyond that demonstrated for the LAeq maps.	The reliable prediction of maximum sound levels (LAmax) for construction noise is not possible due to its inherent variability and dependence on the sound source, its operation and the ways in which operatives may work. We therefore consider that it would not be possible to create any more meaningful maps of LAmax than what has been presented. BS5228-1 is the British Standard for predicting and assessing construction noise. It does so in terms of an equivalent continuous sound level, LAeq, which takes account of variations over the course of the construction period due to different activities and times for which plant is operating. Section 8.5.2.5 of BS5528-1 states that “There are no general empirical relationships between LAmax and LAeq, T.” As well as the LAeq, the standard does provide a prediction method to estimate L01 (the level that is exceeded for 1% of the time), which the BS considers to provide a better representation of short-duration, high-level impulses than the LAeq but is not the same as LAmax. Furthermore, relationships between the LAeq and L01 are defined in the standard only for some percussive piling methods. If percussive piling is considered by the contractor to constitute best practicable means of working (BPM) then an assessment could be undertaken in this way, with knowledge of the specific type of piling hammer to be used but that is not possible at this stage. Additionally, we have agreed with NE on other recent projects that calculation of a worst-case LAeq as used in the map provided in Figure 3 of the HRA [APP-153] (i.e. assuming all the construction plant is operating continuously and simultaneously, rather than being corrected for % on-time) would provide an acceptable approximation for the risk of impacts on birds. The noise maps presented in Figure 3 of the HRA [APP-153] show the results of noise modelling undertaken using a worst-case construction scenario. Construction plant items associated with piling activities (including compressors, generators and vibratory piling rigs) have been modelled as multiple simultaneous noise sources distributed across a limited area of the Site where piling is anticipated to occur. No time correction has been applied i.e. all plant sources are assumed to operate concurrently, rather than being adjusted for the percentage of time during the assessment period for which they are operating. As such, the predicted sound levels represent a conservative, worst-case assessment of piling noise. Where required, the use of temporary construction noise barriers around piling plant would reduce noise emissions by approximately 5-10dB at nearby receptors, depending on barrier height, placement and receptor location. For effective performance, barriers would need to be installed as close as practicable to the noise source. The implementation of such barriers represents established good practice on construction sites and can be incorporated where required as part of standard noise mitigation measures.
NE2	Figure 4 provides noise contour information for the operational impacts. This also demonstrates that the most significant noise impacts (>65db) will overlap with the site of the Keadby wind turbines, and the noise impacts will reduce beyond this. However, the maps are based on noise levels calculated using the LAeq measure, and therefore this does not demonstrate potential impacts from loud bangs which can be more disturbing to birds than constant noise. We also note that the significance criteria outlined in 5.2.11 uses the LAmax figures. We	As for construction, there is no data available which would allow LAmax of operational plant to be calculated. Such information is not provided by equipment manufacturers nor is it otherwise available. LAmax levels may also be affected by site activity, maintenance processes etc that are highly variable day to day. Any estimate of LAmax would therefore be subject to very large uncertainty and so would not yield a meaningful assessment. The combination of the assumption that all plant would be operational simultaneously in a limited area of the Site, close to the Site boundary, and without the implementation of any additional

Reference	Natural England Comment	Applicant Response
	advise LAmax figures should be provided for the operational activities with the most significant noise inputs, along with contour maps where there is potential for attenuation beyond that demonstrated for the LAeq maps.	mitigation such as noise barriers or enclosures, ensures that the scenario provides a reasonable worst case assessment.
NE3	Natural England concurs with the statement that great bittern, marsh harrier, hen harrier, pied avocet and little tern can be scoped out of further assessment due to lack of suitable habitats in proximity to the proposed development.	Noted
NE4	The assessment does not consider the impact that the discharged water and sediment transport may have on the forage resource for birds and lamprey within the River Trent. Designations on this section are Humber Estuary Ramsar and SAC only, however the birds associated with the SPA may still use that section of the river as supporting habitat.	The impact of the discharge water has been assessed within the relevant section. The discharge parameters will remain unchanged and there would be no pathway for increased sediment transport. The Applicant has updated the HRA to signpost to the relevant information and has provided at Deadline 1.
NE5	Noise and/or sediment can create a barrier to movement. While noise impacts have been deemed negligible, sediment has not. For works occurring between 1st May and 30th November activities should therefore be restricted to daylight hours only, i.e., between dawn and dusk. This is to avoid activity occurring at peak migration periods (i.e., at night). Lighting impacts, especially when used outside of daylight hours, should also be considered due to the risk of impacts to migration in the River Trent.	As agreed in the meeting held between the Parties on 11 December 2025, the Applicant has updated the HRA to provide the clarifications requested to address this comment. The updated document has been provided at Deadline 1.
NE6	For abstraction activities in the Stainforth and Keadby Canal it should be noted that we do not agree with the approach to assessment stated in paragraph 5.3.64 as any proposed mitigation measures must be definite and secured within the DCO documentation. However, based on the information provided in the HRA that the lock gate is essentially a full barrier to movement, and therefore would prevent connectivity to the SAC population, which was also supported by eDNA surveys. As well as the additional built in measures outlined in 5.3.60 - 5.3.63 which also would act to reduce impacts for any lamprey that did pass through the gate, we concur with the conclusion of no AEOI for this feature during operation. For noise impacts associated with installation of the cofferdam during construction we also concur with the conclusion of no AEOI, based on the evidence provided in section 6.2 of the HRA	The Applicant has reframed the narrative within the relevant section of the updated HRA in response to Natural England's comment on paragraph 5.3.64 and noting that Natural England concurs with the wider rationale and evidence. The updated HRA has been provided at Deadline 1.
NE7	In ES Volume I: Chapter 8 Air Quality response to our previous comments on the PEIR and draft HRA is noted and welcomed. In particular: • Confirmation that ammonia is included in the traffic assessment; • Confirmation that the assessment addressed the worst case of 100% gas firing and 100% hydrogen firing, with intermediate mixtures being between either scenario; • Consideration of in-combination projects; Inclusion of Appendix E with the AQ tables drawn from the main assessments – which makes the HRA much easier to follow.	Note.
NE8	A map of the ARN would be useful.	The ARN is shown in ES Volume III, Figure 8.3 - Construction Study Area [APP-100]. Shown as the "Modelled Road" in green.

Reference	Natural England Comment	Applicant Response
NE9	NE has several comments on the air quality assessment across Chapter 8, Appendix 8A/8B, ES Chapter 11 and the HRA. As a large protected site, the Humber Estuary SAC (and associated SPA, Ramsar and SSSI) contains many qualifying features. At LSE/ initial assessment stage (i.e. considering whether or not 1% is exceeded alone or in combination) the most sensitive feature should be used. In this case, this would be the "Fixed coastal dunes with herbaceous vegetation (grey dunes)" – with a Ndep critical load of 5-15kgN/ha/yr, and an ammonia critical level of 1ug/m^3. However, NE acknowledges that this habitat type is distant from the River Trent, on the coast, and there is no suitable location nearby where this habitat would be expected to expand to. **Therefore, it is acceptable, in this case, not to screen in on the basis of this habitat.**	Noted.
	The applicant provided mapping indicating that the "pioneer saltmarsh" associated with the "'Salicornia and other annuals colonising mud and sand" (H1310) saltmarsh was located at Blacktoft sands (OE32) – alongside "upper marsh" and "reedbeds". Land closest to the site on the banks of the River Trent was mapped as a mosaic of "reedbeds" and "upper marsh". These features would appear to be indicative of the features of H1130 'Estuaries' and H1140 'Mudflats and sandflats not covered by seawater at low tide'. APIS records the "Estuary" feature as being associated with Atlantic upper-mid & mid-low salt marshes, stating "the lower level of 10 kgN/ha/yr should be applied to the more densely vegetated upper marsh (e.g. EUNIS class MA223, MA224) and to areas of marsh subjected to direct run-off from adjacent catchments (NRW recommendation). For pioneer saltmarsh (MA225) use the higher 20-30 kg N/ha/yr critical load". The salicornia pioneer saltmarsh (H1310) can therefore use the 20-30kgN/ha/yr range, reflecting its lesser sensitivity due to more frequent inundation.	H1140 is not a habitat where terrestrial vegetation occurs. The only higher plants likely to occur are species of Zostera. This species is not present with the inner Humber Estuary and its rivers. APIS clarifies that the nitrogen impact on MA223 and MA224 relates to: • MA223 - Increase in dominance of graminoids; decline positive indicator species • MA224 - Increase in late successional species; decline positive indicator species Therefore, it would not be appropriate to assess the riverbank stands of common reed against the levels set for true saltmarsh given the nitrogen risk relates to increased dominance by grasses. Common reed is a grass species and already dominates (as is typical for reedbed habitats). The HRA has been updated to refer to 'upper marsh' and notes that the habitat classification used by the Environment Agency to map this vegetation clarifies this is grass and graminoid dominated vegetation. The communities are considered further in this context. The Applicant has amended the HRA to provide the additional rationale requested, including the above. Natural England accepted the above points during the meeting held between the Parties on 11 December 2025.
	The applicant states (e.g. HRA 5.2.29, Ch 11 section 11.7.97) that "During the examination of the Keadby CCS Power Station DCO, Natural England initially advised that this species-poor riparian vegetation on the banks of the River Trent should be considered saltmarsh in the context of the Humber Estuary SAC and Ramsar site. However, following further review and discussion, it was agreed that this vegetation is not of a type listed as a qualifying interest feature of these sites". They state that the "pioneer saltmarsh [...] develops at the lower reaches of saltmarshes where the vegetation is frequently flooded by the tide, and can also colonise open creek sides, depressions or pans within saltmarshes, as well as disturbed areas of upper saltmarshes (JNCC, 2025). There is no niche for such vegetation on the River Trent at Keadby, where there is only a narrow band of intertidal mud that is fully covered by all tides and a sharp transition from this to dense perennial vegetation of common reed." Section 11.7.97 indicates that "the vegetation closest to the Proposed Development is considered to be transitional reedbed which is a species-poor	The Applicant has considered the advice and points raised during the updates made to the HRA to provide the clarifications requested to address this comment, as agreed during the meeting with Natural England on 11 December 2025.The updated HRA has been provided at Deadline 1. See also the previous response.

Reference	Natural England Comment	Applicant Response
	plant community that is not sensitive to additional nitrogen. Further, the qualifying mudflat and estuary habitats present in the affected area are not sensitive to nitrogen deposition as they do not support vegetation". While previous discussion agreed that the riverbank vegetation was not true "saltmarsh" in accordance with the estuary qualifying feature, it is **not considered appropriate** that the vegetation closest to the proposed development is not assigned a critical load – at least in screening - as it is within the designated Estuary, and, in the upper reaches could have potential for more diverse upper marsh/ reedbed vegetation to develop. For example, reedbed vegetation could be addressed under the "fen marsh and swamp" habitat class – as defined in APIS as "rich fen" (as acknowledged at HRA 5.3.35) – this habitat could also be appropriate for the saltmarsh/ reedbed mosaic at Blacktoft sands. The range for this is 15-25kgN/ha/yr. In the AA it may be appropriate to use a higher point in this range, recognising the extent of inundation at the most affected area – and concluding that this would not be appropriate for more sensitive habitat types to colonise. Inundation of the muddy substrate would be expected to add nutrients to the system beyond those from atmospheric pollution, indicating that the site may be less sensitive than "pristine" rich fen. Any argument that the area closest to the site would not have this potential, or that no more sensitive habitat could develop in the area should be provided within the appropriate assessment. **However, on a precautionary basis, if the saltmarsh critical load (as the most sensitive feature) is not applied at screening, the lower reedbed critical load should be used.**	
NE10	Critical levels and loads for the sites in question are provided across several tables. In all cases, the annual NOx critical level of 30µg/m3 **is appropriate**.	Noted.
	Humber estuary (Table 8.13/ Table 8A.19-21/ HRA Appendix E) has been assigned: • ammonia critical level of 3µg/m3 - this is likely acceptable, but evidence should be provided that lichens/ bryophytes would not be integral to the "upper marsh/reedbed" communities adjacent to the site, or that there would be no potential for more sensitive features to be present in the most affected area. This may impact the assessment provided in section 8.6.21. (Receptor OE32 at Blacktoft Sands should also be considered). **Where the relevant feature is frequently submerged it is accepted that bryophytes/ lichens will not be integral**. Ndep critical load of 20kgN/ha/yr – As indicated above, APIS indicates the lower critical load is 10kgN/ha/yr for the estuary/ upper saltmarsh features. This critical load should strictly be used at screening, as the most sensitive feature. **In the appropriate assessment it may be appropriate to assign another critical load** – for example, that for "fen marsh and swamp" of 15s-25kgN/ha/yr, with justification if the higher point of that range is used.	APIS says that lichens/ bryophytes are not integral to the "upper marsh/reedbed". The Applicant has reviewed the habitat features of the SSSI on the Natural England website to identify the qualifying swamp and saltmarsh NVC communities (sand dunes are agreed as scoped out based on distance) and then reviewed these communities against the NVC manuals to determine if bryophytes and lichens are a particular feature of these communities, and the typical species present. In doing so the Applicant considers it relevant that bryophytes and lichens, as with higher plants, encompasses a broad range of species of differing status (common to rare, threatened or unthreatened) and ecological requirements (generalists versus specialists) and tolerances. Almost all habitats have potential to support common species of bryophytes and lichens, but this does not make it is necessary to apply the lower critical level where they do not have specific relevance to the habitat/community being assessed. The lower critical level should be used where these are a particular feature interest feature of the habitat/community. This is not the case for any of the relevant NVC communities as further explained below. The relevant NVC communities and their relevance are as follows: • S4 – "overwhelmingly dominated by common reed", bryophytes "generally absent". A limited suited of common bryophytes incidentally present. No identified lichen interest. No specific reason to apply the lower critical level.

Reference	Natural England Comment	Applicant Response
		• S21 - "bryophytes are very sparse". A limited suited of common bryophytes incidentally present. No identified lichen interest. No specific reason to apply the lower critical level. • S26 - "bryophytes are very sparse". A limited suited of common bryophytes incidentally present. No identified lichen interest. No specific reason to apply the lower critical level. • SM2 – submerged habitat, not relevant • SM6 - No identified bryophyte or lichen associates. Not relevant. • SM8 - SM15 - No identified bryophyte or lichen associates. Not relevant. • SM16a & b - No identified bryophyte or lichen associates. Not relevant. • SM16c & e - A limited suited of common bryophytes incidentally present. No identified lichen interest. No specific reason to apply the lower critical level. • SM24 - No identified bryophyte or lichen associates. Not relevant. • SM28 - A limited suited of common bryophytes incidentally present. No identified lichen interest. No specific reason to apply the lower critical level. • · The above will be covered where ammonia is first mentioned within the construction air quality impact assessment of the HRA
	Risby Warren SSSI (operational assessment) is assigned an ammonia critical level of 1µg/m3 with which **NE agrees**.	Noted.
	Hatfield Chase Ditches SSSI (construction traffic assessment) - Table 8A.19-21 indicates no critical loads or levels are available. This should be reassessed, as the "lowland ditch systems" contain wetland species and reeds, so could be assessed as a fen ecosystem (15-25kgN/ha/yr). Ammonia and NOx critical levels are also provided in APIS (bryophytes and lichens are likely to be integral in wetland ecosystems).	This comment conflates aquatic vegetation (which comprises submerged, floating leaved and emergent species) that might typically be found in any pond, ditch or watercourse, with the wetland habitats (fen or reedbed) covered by APIS. The aquatic species are rooted within the watercourse and therefore the approach for aquatic habitats is considered most appropriate. These species are not affected by N deposition to foliage, and freshwater environments are typically phosphorus limited and therefore it is the availability of phosphorus which dictates the growth response of freshwater vegetation and thus eutrophication. The emergents named on the citation as typical to dominant are all species of eutrophic lowland watercourses. There is no basis to assert that bryophytes and lichens are likely to be integral to the qualifying habitat. The requirement (as noted in APIS) is to assess assemblages of relevance to the integrity of the qualifying habitat; not general species present incidentally (as might be found in most habitats). The citation refers to higher plants only, and the herbaceous emergent vegetation at the margins of ditches would not reasonably be expected to support lichens, or notable terrestrial assemblages of bryophytes (aquatic species not requiring assessment). This is not the type of fen or marsh habitat that APIS guidance (e.g. habitats with a sphagnum layer). addresses given it is fringing emergent vegetation in a watercourse. The construction traffic assessment shows that for all receptors that have been modelled, impacts of NOx and ammonia are <0.1ug/m3 change and negligible impacts, therefore it is not considered that the impacts at the Hatfield Chase Ditches would be any different. The N-deposition at Hatfield Chase Ditches is 0.11 kg N/ha/yr and therefore against a Critical Load of 15kg N/ha/yr this represents 0.8%.
	Crowle Borrow Pits SSSI (construction traffic assessment) Table 8A.19-21 ammonia critical level of 1µg/m3 with which **NE agrees**; NE note that table 8B14	APIS states that bryophytes and lichens are not integral for the lowland ditch habitat. Not identified as a qualifying feature on the Natural England website.

Reference	Natural England Comment	Applicant Response
	in the operational assessment for this site has CLevel as 3ug/m^3 which is **not considered correct** for the wet wood/ fen habitat. Ndep critical load of 10kgN/ha/yr reflecting the broadleaved deciduous woodland with which **NE agrees**.	In addition, Tthe Applicant notes correspondence from Natural England on the consented Keadby 3 DCO which confirmed that the appropriate critical level for this site is 3ug/m3.
	A range of operational receptor sites (table 8B.10) indicated that no critical levels or loads apply, without justification of the relevant features. **Further information is required to provide justification for this indication.** The Operational assessment (Table 8B.14) assigns ammonia critical levels of 3µg/m3 to several SSSIs, some of which are considered to have the potential to have bryophyte interest, **which should be considered**. Eg Crowle Borrow Pits SSSI - alder carr, scrub, fen and open water (the correct 1µg/m3 level is assigned in the construction traffic assessment) • Broughton Far Wood SSSI – ash and oak woodland with diverse understorey • Broughton Alder Wood SSSI – alder woodland with diverse understorey, including a carpet of mosses, as outlined in the citation	This is based on the information provided by the APIS website. The Applicant notes correspondence from Natural England on the consented Keadby 3 CCS Power Station DCO dated 18 February 2021, which confirmed that the appropriate critical level for ammonia for this site is 3ug/m3. The letter (appended to this document) stated "At Crowle Borrow Pits, Broughton Far Wood and Broughton Alder Wood SSSIs, lichens and bryophytes are present on site, however, they are not a reason for the SSSI designation nor an integral part of a SSSI feature. Therefore Natural England accepts that the higher threshold can be applied for these sites."
	Humber Estuary (at Blacktoft Sands) Ramsar, SPA, SAC and SSSI would have a different range of features to the site immediately adjacent to Keadby, so **may require a separate assessment** as to whether bryophyte communities could be integral.	The Applicant has updated the HRA to provide the clarifications requested to address this comment, as agreed during the meeting held between the Parties on 11 December 2025. Please refer to the previous responses relating to bryophytes which confirms and explains why these are not integral.
NE11	It is unclear to what extent an in-combination assessment has been undertaken within the modelling informing the assessment. *In combination construction traffic* It is accepted that traffic numbers informing the traffic modelling in the construction assessment are intrinsically in-combination. However, it is unclear whether other sources that could overlap temporally or spatially with the vehicle emissions are considered. For example, non-traffic emissions from agricultural or industrial developments close to the protected sites adjacent to the road. 8A.2.5 suggests that in-combination (cumulative) projects (as outlined in Ch 21) are considered in the construction assessment "where relevant" but not which emissions were added to the construction (and/or operational) modelling.	To develop the initial longlist of developments to inform the assessment a range of criteria were adopted including: • NSIPs within 15km; • Major developments (as defined by Section 2 of the Town and Country Planning (Development Management Procedure) (England) Order 2025) within 5km; • EIA screening requests within 5km; • Marine licence activities or development within 5km; and, • Non-major development within 1km (other development which does not meet the criteria for major development. The above search criteria would have included any development which met these criteria including agricultural developments. As no agricultural developments were identified which met the above criteria they were not included in the assessment as their scale would mean no cumulative effects would be likely to occur.
	In addition, Ch21 (table 21.6) acknowledges that projects including Humber Carbon Capture Pipeline, Moors Solar Farm, Pilfrey Solar Farm and North Humber to High Marnham could result in in combination construction traffic, but the applicant screened this out due to mitigation and control measures (though these would not impact traffic numbers). It is unclear whether these projects were nevertheless included in the traffic modelling.	A full list of schemes included in the traffic numbers is included in Chapter 10 :Traffic and Transport [APP-044]. This list includes those schemes listed in the Natural England representation. Therefore, in-combination impacts are <1%.

Reference	Natural England Comment	Applicant Response
	The traffic modelling is stated (App 8A) to have been undertaken in accordance with the method set out in DMRB LA 105. NE does not consider this method is appropriately precautionary to assess ecological impacts. For example, in-combination impacts should be considered before confirming <1%.	
	Operational assessment For the operational assessment, it is stated (e.g. in 8B.2.21) that "There are no short-listed schemes with significant sources of combustion gases that require dispersion modelling, and therefore no further consideration of these schemes is carried out in this Chapter". NE would require confirmation that all relevant emission sources are included (including traffic and waste emissions during operation for example) and not just combustion gases. There also appears to be acknowledgement of potential in-combination impacts in Ch21. For example, ammonia and N dep impacts are identified at Risby Warren SSSI arising from North Lincolnshire Green Energy Park alongside the proposed development, so it is unclear why these are not included in the in-combination assessment, despite mitigation being in place to reduce emissions to the SSSI. HRA App F indicates, regarding North Lincs Green Energy Park that the HRA Report for this development "considered Keadby CCS which is comparable with the Proposed Development. In reaching a decision the SoS concluded that, alone or in-combination, an Adverse Effect on Integrity of the relevant European Sites can be excluded beyond all reasonable scientific doubt. Given this conclusion and the currentness of the decision, there is no reason to re-visit this in relation to the Proposed Development". It is understood that should the proposed development go ahead, Keadby CCS would not – but this does not appear to be stated explicitly in the main body of the assessment, and if relevant, should be applied to the assessment of impacts at Risby Warren SSSI as well as the European sites. The AA indicates that "the AQ assessment was undertaken in-combination from the outset" (HRA 6.3.3) – however, as indicated above, it does not appear that relevant industrial in combination projects were scoped into the modelling, or that the search for possible projects included potentially relevant applications, such as agricultural developments in the area. This should be explored over the course of the examination.	There is no in-combination assessment of other schemes within Appendix 8B: Air Quality Operational Assessment [APP-062], as this appendix just provides the impacts of the Proposed Development. The assessment of cumulative impacts is carried out in Chapter 21: Cumulative and Combined Effects [APP-055]. The Applicant notes that operational traffic emissions are screened out due to the very low numbers, which would result in impacts significantly lower than those predicted for the construction traffic assessment. In addition, there are no waste emissions during operation. The Applicant confirms that the in-combination assessment provided in Chapter 21, does include consideration of the Lincolnshire Green Energy Park. The HRA has been updated to clarify which elements of the assessment are in-combination from the outset (i.e. the traffic assessment) and which aren't. All relevant developments have been considered. The updated HRA has been provided at Deadline 1.
NE12	As modelling of Keadby 2 has been undertaken in order to add it to the baseline, this is considered appropriate, even though it is a "post APIS" development, operational only since 2023. It is acknowledged that Keadby2 may actually be emitting less than predicted/ modelled, so the background pollution may be presented as higher than in reality. There is no intention to "remove" emissions from Keadby 2 as a result of the proposed development, so the absence of actual operational monitoring to inform the background/ baseline would not affect the results/ conclusions of the assessment (to overestimate the benefit of the proposal against a hypothetical baseline)	Noted.

Reference	Natural England Comment	Applicant Response
NE13	In chapter 8, the measures outlined at 8.5.4-8.5.8 are not considered to be mitigation for the purposes of HRA as they are required to operate the proposed development (for example, stack height and ELVs). However, it is noted that they could be amended further should any AEOI remain using these 'worst-case' scenarios. The CEMP/ DEMP however, is considered to be mitigation for HRA purposes as measures can be amended to reflect the extent of impact/ risk predicted.	Noted.
NE14	The assessment process outlined in 8.3.14 is appropriate, and in accordance with IAQM guidance. It is noted that unmitigated impacts are considered, which is the requirement for HRA. NE agrees with the pre-mitigation high risk to the Humber Estuary and Crowle Borrow Pits SSSI (Section 8.6 in ES and App 8A). The mitigation proposed is acceptable but must include measures specifically to mitigate impacts at the two protected sites, and monitoring to ensure this is effective. NE disagrees with the assessment in the HRA (5.2.31 and Ch 11 para 11.7.8) that there would be no LSE to the Humber Estuary – as the pollutant could reach the designated site and potentially smother qualifying vegetation. However, the argument provided that any dust would add trivial amounts to the existing high sediment load already carried by the estuary and would be removed with tidal cycling is accepted, and with mitigation proposed in the CEMP (assuming the required monitoring is put in place) it is accepted that there would be no AEOI on the un-submerged reedbed/ marsh vegetation of the estuary	The Applicant has updated the HRA to provide the clarifications requested to address this comment, as agreed during the meeting held with Natural England on 11 December 2025. The updated HRA has been provided at Deadline 1.
NE15	Ch 8, App8A and Ch 11 - (Comments on the in-combination assessment also apply to this assessment. It is unclear if the conclusions reached apply in-combination with all other relevant developments in the area). It is acknowledged that ammonia has been included as an emission from traffic, both in its own right and as a component of Ndep. Ch 8 indicates that the CREAM tool was used to calculate ammonia emissions. However, elsewhere (e.g. 8A.4.10 and Table 8.6) it is indicated that the National Highways tool is used – and Table 8.6 also indicates CREAM is a NH tool. This should be clarified, as these are two separate tools.	The Applicant notes that all schemes previously mentioned within the representation were included in the traffic assessment and therefore the assessment is in-combination with other relevant developments. The Applicant notes that reference to the CREAM tool is incorrect as the National Highways tool was used for the assessment of ammonia emissions.
	NE agrees that SO2, CO, benzene, and 1,3-butadiene can be excluded from further assessment (Ch 8 – para 8.3.20) as critical levels would not be exceeded.	Noted.
	The use of the IAQM AADT threshold for screening is acceptable, though consideration of any roads where traffic numbers could result in >1% of the relevant critical load (alone or in combination) would be more precautionary. Use of the more precautionary traffic numbers in the PEIR for AQ modelling are acknowledged, despite lower numbers being modelled for the ES traffic assessment. Use of the 2030 emission factor data for the 2036 construction/ opening year is also acknowledged as precautionary. NE accepts that most	Noted.

Reference	Natural England Comment	Applicant Response
	vehicle movements would be >200m from the protected sites so would not require assessment.	
	The conclusions of the construction traffic assessment (App8A Table 8A.19-21 and ES Section 8.6) are that predicted NOx, nitrogen deposition, ammonia and acid deposition would be less than 1% of the lower critical load for all receptors assessed (Humber Estuary, Hatfield Chase Ditches SSSI and Crowle Borrow pits SSSI) – or that critical loads and levels are not appropriate. As indicated previously, NE does not agree that Hatfield Ditches SSSI, adjacent to the construction traffic route, does not have relevant critical levels/ loads (e.g. the APIS backgrounds should be included in Table 8A.18). Therefore, at present NE **cannot agree that LSE can be excluded**, where the project alone would lead to <1% of the critical level/ load for the most sensitive qualifying feature. This would also affect the conclusion reached at HRA 5.2.66 that there would be no impact on foraging resources of the Humber estuary SPA birds, through atmospheric pollution affecting habitat structure and function to the detriment of fish and invertebrate prey species. However, assuming further evidence to demonstrate that the **conclusion is based on a robust in-combination assessment** is provided NE could agree that no further assessment of the protected sites assessed would be required and there would not be LSE/ harm to the protected sites.	The construction traffic assessment shows that for all receptors that have been modelled, impacts of NOx, ammonia and deposition are <0.1ug/m3 (or <0.3%) change and negligible impacts, therefore it is not considered that the impacts at the Hatfield Chase Ditches would be any different. The Applicant does not consider the point raised in relation to the relevance of the Hatfield Ditches SSSI to the Humber Estuary designations to be reasonable. It is agreed that the fish and other aquatic fauna could hypothetically contribute to the available food supply to certain bird species of the Humber Estuary. However, these are aquatic animals occupying aquatic habitat. None of the qualifying species have potential supporting habitats that align with bank vegetation or emergent wetland vegetation of linear watercourses (https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK9006111&HasCA=1&NumMarineSeasonality=15&SiteNameDisplay=Humber%20Estuary%20SPA#SiteInfo). In aggregate these bird habitats are listed as: Atlantic salt meadows, coastal lagoons, freshwater and coastal grazing marsh, intertidal mixed sediments, intertidal mud, intertidal sand and muddy sand, Salicornia and other annuals colonising mud and sand, the water column (for avocet and tern), intertidal seagrass beds, coastal reedbeds, other reedbeds within the tidal reach of the estuary (with specific emphasis on pools within these reedbeds), arable land and permanent pasture. Assessment of the Hatfield Ditches SSSI against wetland habitats is not relevant to the food resource available for wading birds feeding on invertebrates within mud or access to fish by common tern. Further assessment of Hatfield Ditches SSSI is therefore not a reasonable requirement for purposes of the HRA.
	NE also agrees that the impact of waterborne abnormal loads along the River Trent (Section 8.6.8) is likely to be negligible as assessed due to the low numbers involved. However, these should be outlined and emissions estimated (e.g. fuel used by barges could have an adverse effect if it is highly sulphurous, or using ammonia as a fuel, potentially). It is assumed that road-delivered abnormal loads are included in the assessment of construction traffic so would not require additional assessment.	LAQM TG(22) guidance recommends an assessment on port and shipping emissions if there are: • more than 5,000 large ship movements per year, with relevant exposure within 250m of the berth and main areas of manoeuvring; or • more than 15,000 large ship movements per year with relevant exposure within 1km of the area. The number of waterborne loads will be significantly below these thresholds for assessment, and therefore it is considered that no assessment is required. Additionally, it is unlikely that any barges used would be ammonia fuelled and sulphur content of diesel fuels is regulated to be <0.5% sulphur, to minimise emissions of SO2. It is therefore considered that impacts of these pollutants would be insignificant. The Applicant confirms that road-delivered abnormal loads are included in the assessment of construction traffic.
NE16	Ch 8, App8A and Ch 11 and HRA - The assessment was limited to receptors within 200m of the plant (ES chapter 8 - 8.3.18). Although this is likely to be appropriate for many items of plant (vehicles such as diggers, dozers etc which would be anticipated to impact over a short distance given the location of exhausts etc), others such as generators could be anticipated to have an impact over a greater distance**. It should be confirmed whether such plant is**	The closest construction activity to the European Sites (and indeed any site) is for the Proposed Canal Water Abstraction and this is located 600m west of the River Trent. Low sulphur fuels will be used for plant equipment and the sizes of such plant are likely to be <1MWth. Additionally, the operational hours of such plant would be unlikely to affect critical levels and loads that are set on an annual basis.

Reference	Natural England Comment	Applicant Response
	proposed, and any evidence that 200m is an appropriate distance for such combustion equipment. NEs standard screening distance for general combustion processes is 500m, or 2km, depending on the nature of the source. The assessment of construction plant in the ES Section 8.6/ App8A does not refer to ecological receptors, but it is unclear whether this is because there were none in the relevant 200m, despite the red line boundary being adjacent to the Humber Estuary. The HRA (5.2.40) does confirm that there would be no construction activities requiring plant and NRMM within the 200m screening distance so there is no requirement to consider non-road machinery and plant. The closest construction activity to the European Sites is for the Proposed Canal Water Abstraction and this is located 600m west of the River Trent.	
NE17	Ch 8 and App 8B - NE agrees that the very low numbers involved would make this appropriate to screen out. Assuming the additional in-combination information requested for construction traffic can conclude there would be no LSE at qualifying features, this justification would be considered acceptable for operational traffic as well.	Noted
NE18	Ch 8, App 8B, Ch 11 and HRA - The modelling used appears acceptable, though NE does not comment on modelling approach/ setup. Use of 5 years met data, and incorporation of buildings and topography in the model are acknowledged. The worst-case parameters are considered acceptable within the Rochdale envelope approach, and the sensitivity testing for stack height acknowledged.	Noted
	Confirmation should be sought that “improved dispersion” provided by a taller stack would not lead to potentially significant impacts at protected sites that are further from the development, where a shorter stack with lesser dispersion would result in lower pollutant levels (though the nature of dispersion over a wider area means this is an unlikely scenario).	The Applicant does not consider that this would be the case, but if a higher stack was required, the Applicant can confirm that this would be checked to confirm it is the case.
	Uncertainties in “final” emissions, and the need for further modelling of the final layout are acknowledged – but it is assumed that there will be requirement in the DCO that emissions will be no greater than assessed in the ES (regardless of the requirement also for an environmental permit).	Noted.
	Key remaining questions around the assessment are: • Whether amines will be emitted as part of the process, and if so if they have been considered in deposition calculations – it is assumed they are not emitted as there is no intention to capture CO2 from the process (due to H2 combustion being intended).	The Applicant notes that no amines will be emitted. The in-combination assessment in Chapter 21: Cumulative and Combined Effects [(APP-055] is considered to include all possible emissions sources, as stated previously.

Reference	Natural England Comment	Applicant Response
	• Whether the in-combination assessment is robust and includes all possible emission sources including e.g. local plan allocations and agricultural projects that could affect the same protected sites. Whether the results presented in App8B cover the project alone or in combination – it is assumed they are alone (see note on in-combination assessment).	Appendix 8B: Air Quality Operational Assessment [APP-062] presents the impacts of the Proposed Development in isolation, with in-combination impacts presented in Chapter 21 [APP-055].
	The assessment of significance level (impact descriptors in table 8.7) is acceptable for the ES, but it must be noted that consideration of harm or AEOI for SSSI and Habitats Sites respectively should be addressed separately. (Text at 8.3.48 refers to Table 8.8 and 8.3.56 to table 8.6, whereas the relevant table is 8.7. In this table, it is unclear what a % change of e.g. 1.5% would class as, as it is between the "very low" and "low" categories). It should be noted that NE does not consider 1% to be "insignificant" as stated in 8.3.55 – unless the total in-combination addition of pollution to a protected site is less than 1%. 1% is a trigger for further assessment to be undertaken because there is a noticeable amount of pollution, reflecting uncertainties in modelling/ rounding errors etc arising at much smaller percentage changes. A 1% addition could in fact be significant in some circumstances.	Consideration of harm or AEOI for SSSI and Habitats Sites is within Chapter 11: Biodiversity and Nature Conservation [APP-045] and the HRA [APP-153]. Table 8.7 – impacts <1.5% would fall in the very low category, whereas impacts over 1.5% would fall in the low category. The air quality assessment has been carried out in accordance with the IAQM guidance and the impact descriptors used are in line with that guidance. Consideration of the ecological impacts is carried out within Chapter 11: Biodiversity and Nature Conservation [APP-045] and the HRA [APP-153] (the HRA has been updated for Deadline 1).
NE19	Ch 8, App 8B, Ch 11 and HRA - NOx assessment (Table 8B.13): Project alone would result in PC of 2.7% at Humber Estuary but <1% for all other statutory receptors (including Thorne & Hatfield Moors SAC/SPA). **In combination assessment therefore required for other receptors**. All receptors are < NOx critical level, so likely to be able to exclude AEOI even if there is LSE. Ammonia assessment (Table 8B.14): Project alone would result in PC >1% at Humber Estuary and Risby Warren SSSI. It is <1% at other SSSIs (including Thorne & Hatfield Moors SAC/SPA) but that is based on a critical level of 3µg/m3 at Crowle Borrow Pits SSSI where bryophytes are likely to be integral (see separate section on critical levels) which could result in >1% alone. **In combination assessment and consideration of critical levels required before discounting harm at other sites**. The conclusion in Ch 8 that the addition of 1% of the ammonia critical level at Risby Warren SSSI is "not significant" is not justified in ecological terms – especially as Risby warren SSSI is exceeding its ammonia critical level. This is not considered in Chapter 11 either (only the Ndep assessment is considered for this protected site). Although the background on APIS for the Humber Estuary is below 70% of the 3µg/m3 critical level (approx. 2µg/m3 which is 66% of the higher critical level – so the PEC is 67% - per Table 8B.14), given the uncertainty around in combination impacts, it would be precautionary to give more consideration to this pollutant at Humber Estuary.	The Applicant notes that the assessment is based on numerous worst case assumptions. It is therefore likely that the impacts of the Proposed Development will be much lower in reality than those presented in the assessment.

Reference	Natural England Comment	Applicant Response
NE20	Ch 8, App 8B, Ch 11 and HRA - N deposition assessment (Table 8B.15): Project alone would result in PC>1% at Humber Estuary, Crowle Borrow Pits SSSI and Risby Warren SSSI. **In combination assessment required before discounting harm at other sites**. *Detailed assessment of Humber Estuary Ndep* - Consideration of the qualifying features at Humber Estuary is addressed in our response to earlier questions. We do not consider sufficient evidence is provided to exclude the qualifying habitat types from ever being present adjacent to the site or at Blacktoft sands (either upper saltmarsh or reedbed/ rich fen habitat types). This could affect the conclusions. For example, the Blacktoft Sands Receptor OE32 has a PC of 0.09kg N/ha/yr, which represents 0.9% of the 'Atlantic upper-mid & mid-low salt marshes' lower Critical Load (11.7.98). Consideration of in-combination impacts in that area is therefore likely to be key. Also, if the "rich fen" critical load is adopted, this could be 15kgN/ha/yr, meaning the PEC of 16.7kgN/ha/yr adjacent to the site (Table 8B.15) is exceeding the lower end of this range. *Detailed assessment of Crowle Borrow Pits SSSI Ndep* – The assessment of the unfavourable condition of the site and existing high Ndep levels are not considered sufficient to be able to exclude impact. However, it is acknowledged that the site is floodplain wet woodland so input from sources other than atmospheric Ndep will likely dominate, and also there does appear to be a general trend in declining Ndep in the area. Although it is likely that there would not be harm arising from Ndep, some further assessment (for example, whether the proposed development would result in a <1year retardation of recovery) or mitigation to avoid impacts are recommended (especially having regard to in combination impacts). *Assessment of Risby Warren SSSI Ndep* – The assessment of the impact at Risby Warren SSSI is not considered to justify that there will not be harm arising. Adding additional Ndep onto an already exceeding site will not allow recovery of the designated features (lichen heath/ acid grassland). (11.7.113 indicates that elements of the qualifying feature (lichen heath) of particular sensitivity to nitrogen deposition have already been lost due to the existing baseline load – indicating that adding more will take the site further from recovery). If harm cannot be excluded (including in-combination with other plans or projects), consideration of additional mitigation could be taken into account – such as ensuring emissions of N pollutants are kept below a set amount through decreased ELVs or reduced consented hours (as suggested at 8B.5.35). Acid deposition assessment – (table 8B.16): <1% at all receptors. At present NE does not agree that LSE from acid deposition at the Humber Estuary can be excluded due to uncertainty of the in-combination impact. (HRA 5.3.20). However, assuming in-combination impacts are considered, it is accepted that there is no requirement for further assessment of acid deposition.	The Applicant has updated the HRA to provide the clarifications requested to address this comment, as agreed during our meeting with Natural England on 11 December 2025. The updated HRA has been provided at Deadline 1. See also the previous responses that address the comment on the habitats of the Humber Estuary. In-combination effects have been considered, with the HRA amended to add clarity on this point.

Reference	Natural England Comment	Applicant Response
NE21	HRA 5.2.54. We advise that the measures taken to avoid or mitigate pollution of the water environment from boat traffic and unloading of cargo should be outlined and the effectiveness of those measures assessed in the HRA.	The Applicant has updated the HRA to provide the clarifications requested to address this comment, as agreed during our meeting with Natural England on 11 December 2025. The updated HRA has been provided at Deadline 1.
NE22	HRA 5.2.55, Water Environment and Flood Risk 12.7.3. We note that it is outlined in the Water Environment and Flood Risk Assessment that while in use, any water entering the cofferdam area via seepage will be disposed of by pumping back into the waterbody. Details should be provided on how water contaminated by pollutants, such as via an oil spillage, will be contained and disposed of such that pollutants are not released into the surrounding canal.	The Applicant has updated the HRA to provide the clarifications requested to address this comment, as agreed during our meeting with Natural England on 11 December 2025. The relevant measures are allowed for within the CEMP and its appendices, as specified in the Outline CEMP, further details will be provided in the final CEMP produced by the EPC Contractor(s) prior to construction.
NE23	HRA 5.2.61, 5.3.47 and OWMP C.4.6. Bunded storage areas for hazardous materials should be sited above any potential flood water level, including tidal storm surge type events which could result in overtopping or breach of defences, to minimise the risk of a spill entering the water environment.	The Applicant has updated the HRA to provide the clarifications requested to address this comment, as agreed during our meeting with Natural England on 11 December 2025. Bunded storage areas are already specified within section 7.4 of the HRA but the wording has been tightened. Note also that the Site levels are to be raised to address flood risk and that this forms part of the design as outlined in Table 4.1 of Chapter 4: The Proposed Development [APP-038].
NE24	Chapter 12 Water Environment and Flood Risk 12.6.25. It is stated in the Chapter 12 that it is anticipated that several drains will be fully or partially infilled and that "Measures are outlined in the Outline CEMP (Application Document Ref. 7.4) to mitigate potential impacts to the water bodies downstream of the drains (12.6.25)". The CEMP, however, does not contain any details of these measures. We advise that the potential impacts of drain infilling on the designated sites downstream should be assessed in the HRA and any mitigation measures needed should be outlined.	The relevant details are in the Outline Water Management Plan which is provided as Appendix C to the Outline CEMP [APP-166]. There are no plausible impacts on the Humber Estuary given one of the drains to be infilled is unconnected to other watercourses, and the other two are minor drains with no standing water and only a very convoluted linkage (over 3.8km) to the Humber Estuary via Glew Drain, Keadby Boundary Drain, Warping Drain and with flow controlled by a tidal lock at the River (as explained in paragraph 6.2.49 of the HRA [APP-XX]).
NE25	HRA 5.3.46. We agree with the conclusion that the surface water pollution pathway has been screened in for appropriate assessment, due to lack of information currently available on the design. Section 5.3.48 implies that Sustainable Drainage Systems (SuDS) will not be used if the option to discharge surface water to Glew drain is chosen. Chapter 12 (12.6.43) however outlines that "The proposed surface water drainage system is to include the use of SuDS to provide treatment of runoff from areas where there is a low risk". We advise that SuDS should be used and that the HRA should clarify this. We note that details of the surface water monitoring program will be submitted at the permitting stage and that this information will inform the permit HRA.	The Applicant has reworded the HRA as advised to match the final text of Chapter 12: Water Environment [APP-046]. The updated HRA has been provided at Deadline 1.
NE26	HRA 6.4 (Appropriate Assessment) 6.4.6 When designing the SuDS you must provide adequate treatment trains for the level of risk associated with the site use. As the surface water will be discharged to a drain which flows into the Humber Estuary SAC/SSSI, a precautionary approach must be used to ensure that pollutants will not reach the designated site. The details of these measures will be needed to inform the HRA for the surface water discharge permit application to demonstrate no adverse effect on integrity of the designated sites.	The Applicant proposes retention ponds and other controls that direct address Natural England's comment. The Applicant has updated the HRA to make specific reference to the required design and how this will be secured. The updated HRA has been provided at Deadline 1.

Reference	Natural England Comment	Applicant Response
NE27	HRA 6.4.11. The Appropriate Assessment concludes that "there will be no adverse effect on the integrity of the relevant European Sites as a result of water pollution impacts on qualifying habitats and species during operation of the Proposed Development". Natural England advises that the HRA currently contains insufficient information to support this conclusion. We do not agree that compliance with the parameters of the CCS Environmental Permit (EPR/YP3133LL/V013) is sufficient to demonstrate no adverse effect of integrity of the designated site. We therefore advise that further information is required to demonstrate no adverse effect on integrity of the site, including in the following areas: • Pollutant levels in effluent discharge (including biocides) • Thermal plume modelling • Discharge water volume	The HRA has been updated with the information that was submitted with the Environmental Permit application for the Proposed Development in December 2025. This current assessment remains fully comparable with Keadby CCS i.e. no change. The updated HRA has been provided at Deadline 1.
NE28	As a licence to displace water voles is considered likely (as stated in section 4.3. Protected Species Licences) Natural England recommend that as per published guidance the applicant considers applying for Letters of No Impediment to assist the decision -maker. The use of the class licence CL31 should be considered where the conditions are applicable.	Noted no further comment required.
NE29	Environmental Statement Volume II – Appendix 11D Badger Survey Report. As works to align an existing pipeline to be used for the Cooling Water Discharge will occur within the land parcel where Setts 9 and 10 are located, Natural England advise considering whether a licence will be required to complete these works. As detailed in Section 11D.5.8, Natural England recommend completing updated badger surveys before works begin to identify if any new badger setts have been created, or that if a badger licence is required, we will expect a site survey to have been completed within six months prior to a licence application being submitted. If further documents are to be submitted to Natural England for comment, we recommend providing maps/figures that show the development layout in relation to the locations of the identified badger setts to evidence that badgers will still have access to foraging habitat during and post -development. It would be helpful to include 10m, 20m and 30m buffer zones around each sett on these maps/figures to support the justification that the setts will not be impacted by the development works	The Proposed Development works to connect into the existing Effluent Discharge, which exits the Keadby 1 and 2 Power Station sites, do not require works in the proximity of badger setts. The point at which the Proposed Development would connect into the existing Effluent Discharge is shown on Plan 2.8: Indicative Water Supply and Effluent Discharge Connection Plan [APP-021]. This does not coincide with any badger setts.
NE30	Plate 1 of the Outline Lighting Strategy shows that works will be completed in close proximity to Setts 9 and 10. If any lighting needs to be installed to undertake these works, the lighting design should be planned to avoid impacts to the setts and any mammal paths as much as possible.	The Applicant notes that Plate 1 of the Outline Lighting Strategy [APP-162] is an extract of the Works Plans and the works area shown in proximity to the identified setts is Work No. 6 which is the effluent discharge connection works. The Applicant confirms that there are no works proposed in this location as the connection to this existing corridor would be made to the west as shown on Plan 2.8: Indicative Water Supply and Effluent Discharge Connection Plan [APP-021].
NE31	It was noted that bat surveys were referenced from the year 2020 and that no surveys have been carried out in the last two years. Natural England's standing advice states that surveys "[...] be carried out in the most recent, appropriate season – except if licensing policy 4 is used "	Comment for PINS. No response required. There are no likely impacts on bats and the rationale for this is provided within Chapter 11: Biodiversity and Nature Conservation [APP-045] and its supporting appendices. There are no trees

Reference	Natural England Comment	Applicant Response
	We suggest the Applicant check to see if a mitigation licence is required using NE guidance on licencing NE wildlife licences. Applicants can also make use of Natural England's (NE) charged service Pre Submission Screening Service for a review of a draft wildlife licence application. NE then reviews a full draft licence application to issue a Letter of No Impediment (LONI) which explains that based on the information reviewed to date, that it sees no impediment to a licence being granted in the future should the DCO be issued. This is done to give the Planning Inspectorate confidence to make a recommendation to the relevant Secretary of State in granting a DCO. See Advice Note Eleven, Annex C – Natural England and the Planning Inspectorate | National Infrastructure Planning for details of the LONI process. The ES should assess the impact of all phases of the proposal on protected species and consideration should be given to the wider context of the site, for example in terms of habitat linkages and protected species populations in the wider area. The area likely to be affected by the development should be thoroughly surveyed by competent ecologists at appropriate times of year for relevant species and the survey results, impact assessments and appropriate accompanying mitigation strategies included as part of the ES. Surveys should always be carried out in optimal survey time periods and to current guidance by suitably qualified and, where necessary, licensed, consultants. Natural England has adopted standing advice for protected species, which includes guidance on survey and mitigation measures. A separate protected species licence from Natural England or Defra may also be required.	or buildings suitable for roosting bats, so there would be no impacts on roosting bats. The habitat quality for foraging bats is poor, as evidenced by previous data, and there has been no change in habitat quality since the last survey. The Natural Environment PPG states "An ecological survey will be necessary in advance of a planning application if the type and location of development could have a significant impact on biodiversity and existing information is lacking or inadequate. … As with other supporting information, local planning authorities should require ecological surveys only where clearly justified. Assessments should be proportionate to the nature and scale of development proposed and the likely impact on biodiversity". The Applicant considers that the approach taken for the Proposed Development is consistent with this.
NE32	We welcome the commitment to delivering BNG on this project. We recommend that the target increase in BNG of 10% across all biodiversity unit types is secured by a suitably worded requirement in the DCO. By reviewing the project's biodiversity gain plan at this early stage, it gives us an opportunity to help maximise outcomes and reduce risks. In particular the commitment to delivery of 30.16% in hedgerow units is welcome. We also note and welcome the connectivity of newly delivered habitats with the LWS. An improvement that could be considered is the current proposal to maintain the habitats for a minimum period of 25 years. We recommend 30 years is committed to, in line with best practice.	Comment for PINS. No response required. The Applicant notes that Requirement 6 (2)(g) of the draft DCO [(AS-003] secures the need to submit a biodiversity net gain (BNG) strategy in general accordance with Appendix D of the Outline Landscape and Biodiversity Management and Enhancement Plan (LBMEP) Report [APP-161]. The Applicant considers that this requirement sufficiently secures the delivery of BNG measures for the Proposed Development.
NE33	NE notes that the proposed development would not appear to lead the loss of over 20ha 'best and most versatile (BMV) agricultural land. For this reason, we do not propose to make detailed comments in relation to agricultural land quality and soils, although sustainable soil management should aim to minimise risks to the ecosystem services which soils provide, through appropriate site design / masterplan / Green Infrastructure. Natural England would advise that safeguarding of soil resources should be secured in the DCO, including the provision of soil resource information in line with the Defra guidance	The Applicant notes that the development of a soil resources plan is secured by Requirement 16 (2)(e) of the draft DCO [AS-003] and will be in general accordance with the Outline Soil Resources Plan which has been provided as Appendix B of the Outline CEMP [APP-166]. The Applicant notes that the Outline Soil Resources Plan includes the need for a soil survey.

Reference	Natural England Comment	Applicant Response
	Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. However, we note that the temporary laydown area will be require production of a method statement for the works to include soil handling and storage proposals. We would also advise that where areas proposed for BNG exceed 20ha and the mapping data obtained indicates potential for it to be BMV agricultural land then Natural England would advise that a detailed ALC survey is carried out to determine the extent of BMV land, and management measures are also included in the soil management plan (SMP). In general, we should not be degrading soils (or BMV land) by extensive physical interventions like topsoil removal, to achieve BNG aims. Not only can it adversely impact on soil health (contrary to the Environmental Improvement Plan aim to sustainably manage 80% of agricultural soils and improve soil health). It may result in damaging soil biodiversity whilst attempting to improve that above, and in other adverse environmental impacts such as diffuse pollution. Ideally, we want to secure 'win-wins' which requires knowing in detail the soil, nutrient and BMV circumstances of the land when master planning the development, not as an after-thought, to identify what and where the on-site BNG opportunities are, and, identifying when off-site BNG is required.	
NE34	The ES should assess the impacts of the proposal on the ancient woodland and any ancient and veteran trees, and the scope to avoid and mitigate for adverse impacts. It should also consider opportunities for enhancement. Ancient woodland is an irreplaceable habitat of great importance for its wildlife, its history, and the contribution it makes to our diverse landscapes. Paragraph 186 of the National Planning Policy Framework (NPPF) sets out the highest level of protection for irreplaceable habitats and development should be refused unless there are wholly exceptional reasons, and a suitable compensation strategy exists. Please refer to Overarching National Policy Statement for Energy (EN-1), paragraph 5.4.53, which states "The Secretary of State should not grant development consent for any development that would result in the loss or deterioration of any irreplaceable habitats, including ancient woodland, and ancient and veteran trees unless there are wholly exceptional reasons and a suitable compensation strategy exists". Natural England maintains the Ancient Woodland Inventory which can help identify ancient woodland. The wood pasture and parkland inventory sets out information on wood pasture and parkland. The ancient tree inventory provides information on the location of ancient and veteran trees. Natural England and the Forestry Commission have prepared standing advice on ancient woodland, ancient and veteran trees.	Please refer to response to NE11 for information on how the long-list of developments for the cumulative assessment was selected. The Habitats Regulations Assessment (HRA) [APP-153] completed an independent review of the long-list of developments as set out in Table 21.4 of ES Chapter 21: Cumulative and Combined Effects [APP-055]. The review is set out in Appendix F of the HRA. The conclusions of the in-combination assessment are set out in Section 7 of the HRA which includes the approach taken to the in-combination assessment of air quality effects.

Reference	Natural England Comment	Applicant Response
NE35	While there is some level of justification on the scoping out of projects for cumulative impacts, further information is required from the Applicant for a number of thematic areas, especially relating to air quality. We note that there is reference to the Outline CEMP (Doc. Ref. 7.4.) but as it currently stands this does not provide a level of detail to demonstrate cumulative impacts will be negligible. Without this information NE do not yet fully understand the impacts of Keadby Next Generation Power Station on the designated site. We advise that the in-combination assessment is updated to fully consider thematic impacts and the lack of information provided by the Outline CEMP.	Please refer to response to NE11 for information on how the long-list of developments for the cumulative assessment was selected. The Habitats Regulations Assessment (HRA) [APP-153] completed an independent review of the long-list of developments as set out in Table 21.4 of ES Chapter 21: Cumulative and Combined Effects [APP-055]. The review is set out in Appendix F of the HRA. The conclusions of the in-combination assessment are set out in Section 7 of the HRA which includes the approach taken to the in-combination assessment of air quality effects.
NE36	Natural England is committed to helping deliver more renewable and low carbon energy in a sustainable manner which avoids adverse impacts on the natural environment. As the government's adviser on the natural environment, climate change is central to NE's work. Climate change is a profound threat to nature and people. The natural environment is experiencing the impacts of climate change and needs to recover, adapt to change and build resilience. Sustainable development can and should contribute to net zero through supporting nature recovery and climate change mitigation and adaptation, helping both nature and people adapt, through Nature-based Solutions. National Policy Statement (NPS) EN-1 sets out strong support for the use of Nature-based Solutions and nature inclusive design, including nature-based solutions being used alongside conventional techniques (4.10.5) and that Applicants should look for opportunities within the proposed development to embed nature-based or technological solutions to mitigate or offset the emissions of construction and decommissioning (5.3.6). NE advises that schemes should deliver 'high nature, low carbon', recognising that the climate and nature crises are inextricably linked, and both emergencies must be tackled together. Renewable and low carbon energy development should not be delivered at the expense of the natural environment.	Comment for PINS. No response required.

18. Response to Maritime and Coastguard Agency

18.1.1. The RR provided by the Maritime and Coastguard Agency [RR-022] is as follows:

"The Maritime and Coastguard Agency (MCA) has an interest in the works associated with the marine environment below the Mean High-Water Spring and the potential impact on shipping, safe navigation, access to ports and harbours, and any impact on our search and rescue obligations.

It is our understanding that the proposed site falls within the jurisdiction of a Statutory Harbour Authority (SHA) – ABP Humber (for the River Trent) and Sheffield and South Yorkshire Navigation – The Canals and Rivers Trust (for the Stainforth and Keadby Canal). The SHA and Sheffield and South Yorkshire Navigation are responsible for maintaining the safety of navigation within their waters during the construction and the operational phase of the project.

We note the application is supported by a Navigation Risk Assessment (NRA) related to construction activities on the Stainforth and Keadby Canal and navigational safety for the use of Railway Wharf on the River Trent for construction deliveries. The NRA states that no works are proposed in the tidal River Trent, but the Proposed Development Site does include areas of the River relating to the use of existing infrastructure – the existing Keadby Power Station water discharge outfall and Railway Wharf river berth. The NRA has assessed the works and activities undertaken in the marine environment as a result of the project.

The MCA would like to ensure that:

The NRA is discussed and agreed with the SHA and that they are in agreement with all hazards identified and the risk control measures.

The applicant continues to work with the SHAs to develop a robust Safety Management System (SMS) for the project in accordance with the Ports and Marine Facilities Safety Code (PMSC) and its associated Guide to Good Practice, to ensure that the risks and impacts on other marine users are As Low As Reasonably Practicable (ALARP).

The Construction Traffic Management Plan includes vessel traffic management noting the AILs on the river and is to be agreed with the SHAs.

The MCA will continue to monitor the project through the Planning Inspectorate examination. However, on this occasion, the MCA is unlikely to have any significant concerns on the understanding the applicant fully addresses the above points."

18.1.2. The Applicant acknowledges the RR from the Maritime and Coastguard Agency.

18.1.3. The Applicant confirms that a Navigational Risk Assessment (NRA) has been provided with the Application as ES Appendix 12C [APP-075] along with an Outline Construction Traffic Management Plan [APP-167]. As noted within the NRA, the Applicant proposes to develop a Wharf Management Plan to minimise impacts on navigation along the Stainforth and Keadby Canal during use of the existing Railway Wharf for waterborne deliveries of Abnormal Indivisible Loads. The development of the Wharf Management Plan is secured by Requirement 22 (Construction Traffic Management Plan) of the draft DCO [AS-003], which also includes the Canal and River Trust as a consultee. The Applicant considers that the inclusion of this requirement provides appropriate controls to safeguard the navigational safety of other marine users during the proposed deliveries.

18.1.4. The Applicant notes that a RR has been submitted by Associated British Ports (ABP) [RR-001] and as noted by this representation the Applicant has previously engaged with ABP on the Proposed Development. However, as ABP have not themselves requested to be consulted at this stage, nor in the development of the Wharf Management Plan, the Applicant has not included them as a consultee in Requirement 22.

19. Response to National Grid Electricity Transmission Plc

19.1.1. The RR [RR-015] provided by National Grid Electricity Transmission Plc is as follows:

"*This relevant representation is submitted on behalf of National Grid Electricity Transmission Plc ("NGET") in respect of the Project, and in particular NGET's existing and proposed infrastructure and land interests which will be located within and in close proximity to the proposed Order Limits.*

The Project proposes the construction, operation and maintenance of a new low carbon Combined Cycle Gas Turbine (CCGT) connecting into NGET's existing Keadby substation located to the east of the proposed Keadby Next Generation Power Station.

The Applicant is seeking temporary and permanent rights over a number of plots containing NGET rights for its 400kV overhead line routes which traverse land around the 400kV substation. NGET also notes that its operational land at Keadby substation (plot 2-63, 2-64, 2-65 and 2-104) has been included within the Order limits for the purposes of Work No. 4A & 4B (works to connect into the substation) and this land is subject to the compulsory acquisition of permanent rights.

Further, the Order limits include several plots required for NGET's critical North Humber to High Marnham overhead line project (the "NHHM Project"). Access will be required across these plots in future to facilitate NGET's construction work for the NHHM Project.

NGET's Statutory Duties

As a responsible statutory undertaker, NGET's primary concern is to meet its statutory obligations and to ensure that any development does not adversely affect those statutory obligations. NGET has a duty to protect its position in relation to apparatus and land which is within or in close proximity to the draft Order Limits. Additionally, NGET must protect its ability to deliver, operate and maintain its future proposed infrastructure.

NGET will therefore require appropriate protection for retained or proposed infrastructure, including compliance with relevant standards for works proposed within close proximity of its apparatus or proposed apparatus.

NGET's rights of access to inspect, maintain, renew and repair such apparatus must be maintained at all times and access to inspect and maintain such apparatus must not be restricted. Further, where the Applicant intends to acquire land or rights, or interfere with any of NGET's interests in land or NGET's apparatus, NGET will require appropriate protection. Further discussion and agreement with the Applicant is required in relation to the impact on its apparatus and rights.

Existing NGET Apparatus

NGET owns and operates the following assets located within and in close proximity to the Order Limits for the Project. These assets form an essential part of the electricity transmission network in England and Wales. The details of the electricity assets impacted are as follows:

Substation

- *KEADBY 400 kV Sub Station • Associated overhead and underground apparatus including cables*

Overhead Lines

- *4KG 400 kV OHL KEADBY - KILLINGHOLME*
- *4ZQ 400 kV OHL CREYKE BECK - HUMR – KEADBY*
- *4ZDA 400 kV OHL DRAX - KEADBY - THORPE MARSH DRAX - KEADBY - THORPE MARSH*
- *4TM 400 kV OHL KEADBY - WEST BURTON 1 KEADBY - WEST BURTON 2*

Cable Apparatus

- *BLYTON CCT1 underground cable*
- *BLYTON CCT2 underground cable*
- *BROUGHTON CCT2 underground cable*
- *BROUGHTON CCT3 underground cable*
- *SGT3 underground cable*
- *SCUNTHORPE CCT1 underground cable*
- *SCUNTHORPE N-S1 underground cable*
- *SANTON CCT1 underground cable*

Future NGET Apparatus

The following NGET New Infrastructure projects are known to interact with the Proposed Development:

- *North Humber to High Marnham Overhead Line*

  The North Humber to High Marnham (NHHM) project ('the project') is a proposed 400 kv overhead line (the 4AF line) approximately 90km in length, running between two proposed substations, one at Birkhill Wood in the East Riding of Yorkshire and one at High Marnham in Nottinghamshire.

  The NHHM project includes the replacement and realignment of a section of the existing 400 kv ZDA overhead line between Ealand and west of the Keadby Next Generation project. Other works, such as temporary access roads, highway works, temporary works compounds and utility diversions amongst others will be required to facilitate the construction of the NHHM project as well as access routes for maintenance of the existing and proposed overhead lines.

  The main interaction between the NHHM project and Keadby Next Generation project will be the shared use of a proposed construction traffic route from the A18 via an existing vehicle entrance and road which will provide NHHM construction access for proposed towers 4AF124 and 4AF125 as well as access to the ZDA overhead line and towers ZDA122, ZDA123, ZDA124 and ZDA125. This access currently provides a route from the A18 to SSE Renewables Keadby Wind Farm.

  The use of this access by the project is critical to the delivery of the NHHM project given the lack of alternative suitable vehicle access points and routes in this section of the NHHM route.

  The NHHM project have engaged with SSE on the use of the access off the A18 and discussions are on-going between the parties in order to secure this as an access route for the NHHM project and to ensure that use of this access for both projects can be coordinated during construction.

  NGET requires that all its existing and future assets, land, and rights are appropriately protected to ensure it can continue to meet its statutory obligations. This includes, but is not limited to, ensuring the deliverability of the NHHM Project. NGET must have adequate protection for its future projects, including protection for future assets and the reservation of future land and rights necessary for the delivery of those projects.

  Protection of NGET Assets

NGET requires robust Protective Provisions to be included within the draft Development Consent Order (the "Order") for the Project. These provisions must ensure that all NGET assets, both existing and any anticipated future assets (including but not limited to those required for the NHHM Project), are adequately protected and that all works comply with relevant safety standards. There is clear precedent for the protection of future assets within DCOs, including the Protective Provisions secured by NGET in the Awel Y Mor DCO and those agreed with the undertaker in relation to the Outer Dowsing Offshore Wind DCO, which is awaiting the Secretary of State's decision.

NGET is liaising with the Applicant in relation to such Protective Provisions. Accordingly, NGET has not appended the version of the Protective Provisions it requires to be included in the Order to this Relevant Representation. However, NGET will submit these at Written Representation Stage, if not agreed between the parties by that point, with an explanation of any outstanding issues.

NGET requires ongoing engagement from the Applicant to agree how the Project works will protect NGET's proposed assets and facilitate all future access, land, and other rights necessary for NGET to deliver its statutory functions, including future projects such as the NHHM Project. NGET will continue to liaise with the Applicant in this regard with a view to concluding matters as soon as possible during the DCO Examination and will keep the Examining Authority updated in relation to these discussions.

Compulsory Acquisition Powers in respect of the Project

Where the Applicant seeks powers of compulsory acquisition over NGET land, or land in which NGET holds rights or apparatus, the Protective Provisions must require the Applicant to obtain NGET's prior written consent to the exercise of such powers. This protection is critical not only for existing assets but also for land and rights required for NGET's future infrastructure, such as the NHHM Project, to ensure NGET is not impeded in the delivery of its statutory functions.

NGET reserves the right to make further representations as part of the Examination process in relation to specific interactions with any NGET projects identified during the Examination process, and as negotiations continue, but in the meantime will continue to liaise with the Project with a view to reaching a satisfactory agreement during the Examination process and will keep the Examining Authority updated in relation to these discussions."

19.1.2. The Applicant's response to NGET's RR is set out below.

19.1.3. The Applicant is in ongoing discussions with NGET regarding the protective provisions included for the benefit of NGET in Part 1, Schedule 9 of the draft DCO [AS-003]. These provisions provide NGET with significant protections in relation to the carrying out of the Proposed Development. For example, paragraph 4 of Schedule 9 maintains NGET's rights of access to maintain apparatus in temporarily stopped up streets. Paragraph 6 of Schedule 9prevents the compulsory acquisition of NGET's interests without NGET's agreement, as requested by NGET in their RR. Paragraph 7 requires alternative apparatus to be installed before any existing NGET apparatus is removed and any alternative apparatus must be constructed to the reasonable satisfaction of NGET and under Paragraph 8 of Schedule 9, NGET must be given the necessary rights and facilities to construct and maintain that alternative apparatus on terms agrees with NGET and must be no less favourable than those it currently enjoys unless otherwise agreed. Paragraph 9 of Schedule 9 provides a procedure for the protection of existing NGET apparatus that is to be retained which requires the undertaker to submit information about the proposed works to NGET at least 56 days in advance, with approval by NGET required before those works commence.

19.1.4. The Applicant will continue to engage with NGET to agree the protective provisions prior to the close of the Examination. In line with Government Guidance "*Guidance on the content of a Development Consent Order required for a Nationally Significant Infrastructure Project"*, the Applicant is seeking to ensure that the protective provisions accurately reflect the Proposed Development and does not consider it correct that NGET's preferred form of protective provisions should simply be included without being adapted appropriately for the Proposed Development.

20. Response to National Highways

20.1.1. The RR provided by National Highways [RR-016] is as follows:

"National Highways' principal interest is in safeguarding the M180. Although the SRN is outside the Order Limits, the traffic impact of the site could be controlled through an appropriate CTMP and DEMP.

We would hope to agree the following with the applicant, within the Draft DCO EN0110001.

Transport Statement (TS)

National Highways considers the TS should be prepared in support of the development proposals for the construction, operation and decommissioning phases. This is considered by NH to be the most accurate methodology to enable to understand and assess any peak hours impacts at the SRN.

The TS accompanying the planning submission is expected to follow relevant guidance, notably the Department for Transport Circular 01/2022 to enable the impact of the assessment of the development proposals at the SRN to be assessed.

There are deficiencies in the submission at this stage as per the point below;

The number of parking spaces to be provided as part of the proposed development for the construction phase of the proposed development has not been specified.

Construction Traffic Management Plan (CTMP)

National Highways consider that a CTMP should inform the development proposals and should be aligned to the TS to ensure there is crossover and compliance between the two documents.

The CTMP should demonstrate the likely impacts of the development on the SRN as well as on existing road users. The CTMP should identify the measures that can be put in place to minimise traffic and associated environmental impacts on the SRN and its adjacent receptors.

There are currently uncertainties relating to the points below, therefore the potentially impacts cannot be fully assessed. The final CTMP produced will need to include additional information and ensure that construction is either appropriately controlled to avoid impact at the SRN or appropriate mitigation measures are included.

The CTMP does not give details regarding the staffing numbers or construction worker traffic generation and references the CWTP instead.

No details about staffing numbers, contractor parking provision or the peak trip generation during the construction period have been provided.

Construction Worker Travel Plan (CWTP)

National Highways consider that a CWTP should inform the development proposals and should be aligned to the TS and CTMP to ensure there is crossover and compliance between the two documents, the following deficiencies are:

No suitable multi-modal (person) trip rates have been set out alongside the travel planning targets, to enable an assessment of residual transport impacts relative to the current land use.

No firm financial commitments for funding various proposed measures, including infrastructure, incentives, and information-based initiatives, across the short, medium and long term, have been specified.

The CWTP also does not specify the funding that would be committed and made available for implementing additional measures in the event that the Travel Plan fails to achieve its stated targets. We request that the Applicant incorporate this information into the CWTP

Decommissioning Environmental Management Plan [DEMP]

It is considered that a Decommissioning Traffic Management Plan can also be secured via a suitably worded planning requirement, should planning permission for the development proposals be granted."

20.1.2. The Applicant acknowledges the response from National Highways and the outstanding issues raised. The Applicant would like to note that following a meeting held between the Parties on 10 December 2025, it was agreed that details relating to number of parking spaces and division of operational and administrative staff can be provided as part of the final Construction Traffic Management Plan (CTMP) to be produced at the detailed design stage, as secured by Requirement 22 (Construction traffic management plan) of the draft DCO [AS-003].

20.1.3. As agreed between the Parties, the Outline CTMP and Outline Construction Workers Travel Plan (CWTP) have been updated to provide the remaining information as requested by National Highways and have been provided at Deadline 1. The Applicant includes a summary of the updates below.

20.1.4. The Outline CTMP has been updated to include details of the staffing number and construction work traffic generation to a similar level of detail to that included in the Transport Statement, ES Appendix 10A [APP-065]).

20.1.5. The Outline CWTP has been updated to allow for modest sustainable transport targets. These targets have not been reflected in the Transport Statement at this stage, given the very modest level of sustainable transport anticipated. The Transport Statement therefore continues to present a busiest case scenario for highway impacts.

20.1.6. The division of operational and administrative staff has also been confirmed to National Highways.

21. Response to North Lincolnshire Council

21.1.1. The RR provided by North Lincolnshire Council [RR-018] is as follows:

"North Lincolnshire Council is aware that as the host Authority we will be automatically registered as an Interested Party in the Keadby Next Generation examination, under Section 102(1)(c) of the Planning Act 2008, and therefore the Council's views will be considered for the duration of the examination.

To assist the Examining Authority in forming its initial assessment of principal issues in advance of the preparation of the draft examination timetable, and ahead of the submission of our Local Impact Report, North Lincolnshire Council wishes to make the following initial representation to identify its main areas of interest at this stage in relation to the Development Consent Order Application.

North Lincolnshire Council acknowledge that there is a recognised need and support for renewable and low carbon energy technology through national planning policy and that the proposed development would contribute towards the targets set for the UK's greenhouse gas emission reduction and increasing the country's energy supply from greener sources.

Notwithstanding this 'in principle' national policy support, the impacts of the proposal must be fully assessed in order to complete a full, fair and detailed planning balance assessment.

North Lincolnshire Council considers that the main issues arising at this stage from the proposal that need to be weighed in the planning balance are as follows:

- *Landscape and visual impacts of the proposed development*
- *Cultural heritage*
- *Ecological impacts and considerations, including mitigation and enhancement*
- *Amenity impacts*
- *Traffic and transport*
- *Air quality*
- *Noise*
- *Contamination*
- *Flood risk and drainage*
- *Socio-economic impacts*

With regards to local planning policy, the Application Site is not allocated for development as part of the Development Plan for North Lincolnshire and is located predominantly outside of defined development boundaries.

The site does benefit from extant consent for the construction of a combined cycle gas turbine (CCGT) power station, comprising a CCGT unit with a capacity of up to 910 megawatts electrical output (gross), carbon capture and compression plant, electrical, gas, and cooling water connections, and associated development under The Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) (Correction) Order 2023. The currently proposed development represents an alternative to the consented CCGT development.

North Lincolnshire Council will, at the required time, be producing a Local Impact Report which will set out its position in full on the above and its view on the broader planning issues relating to this DCO application.

We will continue to engage with the applicant with the aim of providing a completed and signed Statement of Common Ground at the earliest opportunity.

North Lincolnshire Council has engaged in proactive and constructive pre-application discussions with the Applicant and as a result has no Principal Areas of Disagreement to raise at the pre-examination stage. Consequently no PADS has been provided with this Relevant Representation."

21.1.2. The Applicant welcomes the comments from North Lincolnshire Council (NLC) as the host local planning authority. The Applicant notes that NLC will be producing a Local Impact Report and will comment upon this at the appropriate time.

21.1.3. The Applicant confirms that a Statement of Common Ground is in progress and anticipates this being agreed before the start of the in-person hearings in April 2026.

22. Response to Robert Palgrave

22.1.1. The RR provided by Robert Palgrave [RR-020] is as follows:

"The main issue I wish to comment on is the carbon intensity of the power to be generated by this development, taking account of life cycle emissions of carbon dioxide, methane and hydrogen."

22.1.2. The Applicant acknowledges the representation provided by Mr Palgrave. In response, the Applicant would like to note the following points:

22.1.3. The Greenhouse Gas (GHG) Assessment of the Proposed Development, including the GHG intensity of electricity generation for each operational scenario, is described in ES Chapter 18: Climate Change [APP-052].

22.1.4. The GHG Assessment explicitly takes full account of direct CO_2 emissions to the atmosphere (for scenarios that use natural gas as a fuel), upstream emissions from the natural gas supply chain and fugitive emissions of hydrogen from the transmission network and within the Proposed Development.

22.1.5. For operational scenarios using hydrogen as a fuel, the maximum emissions intensity threshold for compliance with the Low-Carbon Hydrogen Standard (LCHS) was applied; this equates to 20gCO_2e/MJLHV.

22.1.6. For each operational scenario, emissions intensities in tonnes CO_2e per GWh of electricity generated are provided in Table 18.10 of ES Chapter 18.

22.1.7. In each scenario, the GHG emissions intensity modelled is lower than the representative intensity for electricity generated by the UK's existing fleet of gas-fired power stations.

23. Response to Timothy Wye

23.1.1. The RR provided by Timothy Wye [RR-021] is as follows:

"On my way to London by bike I stopped for a rest in an old church yard. It was an idyllic sort of place, lichen of varying colours and mosses growing on old, Victorian headstones. For centuries men and women will have walked these paths, being reminded of the limits of our human existence.

When trying to capture the place on camera a man came by, saying: "That makes me so angry." I didn't initially understand what he meant. He wasn't angry at me. Then he pointed at two graves in the background of my shot that he thought I was photographing, both relatively new, made of cleanly machines sandstone - soldier's graves. I had noticed them but didn't pay much attention, I don't like armies and what they stand for, and maybe the stones were talking of honour and glorifying the efforts of the dead while being silent on the thought that they probably shouldn't be there.

I hadn't noticed the dates. There were two teenagers lying there, 18 year olds, from the village close by. The man apparently had known them well. Someone's children, someone's friends, classmates, with their young and formerly healthy bodies, they should have gone on to live a long and full life, should have gone out in the world, to find their own way, find a partner, maybe have children of their own and see them grow up. They lost their lives in a war.

It is probably considered a less important fact in the grand scheme of things when the UK Committee on Climate Change mentions "increased deployment of UK troops abroad" as a consequence of global warming, a fact that in context of law and policy you'll probably dismiss.

Where do we end up though, if we habitually dismiss these facts, each of them with countless unknown stories like this behind them becoming more and more common.

The Paris agreement made clear that we need to limit global warming to 1.5ºC above pre-industrial levels, something that is sort of acknowledged in the amendment to the 2008 Climate Change Act.

We are at 1.5 degrees of global warming. In 2018 we only just passed from 1.1º to 1.2ºC. According to Professor Hansen we are at a rate of warming of 0.4ºC per decade. There is a latency in the system meaning that if we stopped emitting carbon today, it will still get warmer regardless. 2 degrees of global warming will be an absolute catastrophy, we are likely to trigger tipping points, (if we haven't done so already) leading to runaway climate change, or in other words one disaster after another, relentlessly.

Any carbon we freely emit now will have to be taken out of the atmosphere later (or sooner rather than later, see IPCC). To any fossil fuel related

business the price for carbon waste is a hidden externality, a cost (~600$/t currently) that the businesses don't pay. It is the general public that will have to pay for a whole CCS industry that will never be much more than a massive money pit.

When it comes to the project itself, does it make sense to build another power station near Gigawatt Valley, where there is no need for the electric energy and the heat output locally? Does it not put unnecessary stress on the grid where renewable energy might also needs to travel north to south?

What does the "ambition to run the power station on hydrogen" mean? Is it ever going to happen if the tax payers don't carry the cost?

And I guess the hydrogen world probably be fossil fuel sourced, which implies upstream methane leakage before even reaching the CCS plant. Methane (according to NASA) being a 81% stronger climate gas than CO^2 over the relevant period of 20 years at an upstream loss of 2% (as mentioned in various sources online) and 1t of methane converting to 2.7t on CO^2, according to quick calculations (and not calculating the extra energy required to run CCS, the increased leakage of gas cubes as LNG or the embedded carbon) a 90% efficient CCS plant would only actually capture 55% of the global warming potential in electricity production. How can this work if the grid needs to be zero carbon by 2035?

Can the proposed development ever run in a carbon neutral way when considering upstream emissions? I.e. is there scope to supplement green gas with CCS and could it ever be financially viable, considering all the heat is wasted?

Should the generation station be built, it should be mandatory that it is capable of running in synchronous condenser mode, ideally completely on renewables, to be able to provide grid services in an achievable way and without carbon emissions."

23.1.2. The Applicant's response to Mr Wye's RR is set out below.

23.1.3. The Applicant recognises the urgent need for the UK to decarbonise across all sectors of the economy in line with submitted Nationally Determined Contributions (NDCs), statutory carbon budgets, and the 2050 net zero target.

23.1.4. Within the electricity generation sector, the need to maintain security of supply through the development of low-carbon dispatchable installations such as the Proposed Development must be taken into account, alongside the need to decarbonise power generation through the development of

increased renewable energy sources, improved electricity storage, and improving the resilience of the transmission and distribution network.

23.1.5. The Proposed Development is entirely consistent with the UK Government's energy policy, as represented by the Overarching National Policy Statement for Energy (EN-1). This document describes how the government's overall policy landscape for nationally significant energy infrastructure will support statutory emissions reductions while keeping energy affordable and maintaining security of supply.

23.1.6. Regarding the location of the Proposed Development, this is influenced by a number of factors including availability of suitable land, suitable grid connection capacity, proximity to centres of electrical demand, access to current and future sources of fuel (natural gas and hydrogen), and access to potential carbon dioxide transport and storage networks. The site of the Proposed Development has been selected with these factors in mind.

23.1.7. The greenhouse gas (GHG) assessment for the Proposed Development has been carried out using the UK Government's 2025 dataset of emissions factors. The well to tank (WTT) factor for natural gas explicitly takes account of the impact of venting, flaring and fugitive emissions of methane within the upstream natural gas supply chain, so these impacts have been explicitly included for each operating scenario within the (GHG) Assessment presented in ES Chapter 18: Climate Change [APP-052].

23.1.8. The UK Government's standard emissions factors applied within the GHG Assessment have been developed using 100-year Global Warming Potential values for non-CO_2 gases (including methane and nitrous oxide) from the IPCC's Fifth Assessment Report. These GWP100 values are consistent with reporting under the United Nations Framework Convention on Climate Change (UNFCCC) and with the UK's Greenhouse Gas Inventory. The GWP100 figures are also used by the Committee on Climate Change when developing the UK's statutory carbon budgets. Using GWP values with different time horizons would prevent the overall GHG impact of the Proposed Development from being contextualised against the statutory carbon budgets for the UK and devolved administrations.

24. Response to UK Health Security Agency

24.1.1. The RR provided by the UK Health Secretary Agency [RR-023] is as follows:

"*Thank you for your consultation regarding the above development. The UK Health Security Agency (UKHSA) welcomes the opportunity to comment on your proposals at this stage of the project. Please note that we request views from the Office for Health Improvement and Disparities (OHID) and the response provided is sent on behalf of both UKHSA and OHID. We can confirm that:*

With respect to Registration of Interest documentation, we are reassured that earlier comments raised by us on 17 February 2025 have been addressed. In addition, we acknowledge that the Environmental Statement (ES) has not identified any issues which could significantly affect public health.

UKHSA is satisfied with the methodology used to undertake the environmental assessment.

Potential impacts arising from historic ground contamination have been considered in the draft development consent order and there is a requirement that a scheme to assess and manage these impacts, be agreed with the relevant local authority in consultation with the Environment Agency, as the relevant regulatory authorities with regards to contaminated land.

Following our review of the submitted documentation we are satisfied that the proposed development should not result in any significant adverse impact on public health. On that basis, we have no additional comments to make at this stage and can confirm that we have chosen NOT to register an interest with the Planning Inspectorate on this occasion.

Please do not hesitate to contact us if you have any questions or concerns."

24.1.2. The Applicant acknowledges the RR provided by the UK Health Secretary Agency (and Office for Health, Improvement and Disparities). No further response is considered to be required.

25. Response to Weightmans LLP on behalf of Northern Powergrid (Yorkshire) Plc

25.1.1. The RR provided by Northern Powergrid (Yorkshire) Plc [RR-024] is as follows:

"*The following representations are submitted on behalf of Northern Powergrid (Yorkshire) Plc ('Northern Powergrid') as an electricity undertaker for the area within which the Keadby Next Generation Power Station Project is located: There is a significant amount of Northern Powergrid's infrastructure within the red line boundary area of the Order. A substation within the ownership of Northern Powergrid, Keadby Substation, is situated just beyond the DCO's current red line boundary. This results in extensive EHV cables and overheads which run through the DCO indicative plan being potentially affected, and thus the project has a direct impact on Northern Powergrid's existing critical national infrastructure which serves significant numbers of customers in the local and wider area. Northen Powergrid's rights for these assets are essential in maintaining an uninterrupted power supply to the customers they serve. Northern Powergrid has a statutory duty to provide its customers with an uninterrupted supply of electricity and thus rightly raises concerns to any scheme that would result in a breach to its duty. The proposed development seeks to interfere with Northern Powergrid's existing apparatus. Northern Powergrid therefore reserves the right to review the position as the scheme progresses and protect its existing apparatus including with bespoke protective provisions in the Order, as at this stage, the specific details of the DCO infrastructure including the depth, diameter and respective easement strips are unknown. Northern Powergrid's existing apparatus may need to be diverted to accommodate the DCO project and therefore Northern Powergrid requires bespoke protective provisions to protect its position and recover the costs of any required diversions or relocations. Northern Powergrid also has concerns over the currently proposed protective provisions contained within the draft Order as they do not take into account site specific issues and do not accord with Northern Powergrid's standard protective provision requirements. The compulsory purchase powers incorporated into the DCO seeks to acquire land and interests which, if acquired, would adversely affect Northern Powergrid's ability to use, access, maintain and where necessary upgrade its equipment. It is not necessary to acquire these interests where an agreement between the parties would be more appropriate. Northern Powergrid is keen to discuss its concerns with Keadby Next Generation Limited ('the Applicant') to reduce the project's impacts on Northern Powergrid's apparatus and agree bespoke protective provisions within the draft Order*."

25.1.2. The Applicant notes the comments in Northern Powergrid (Yorkshire) Plc's RR and has contacted Northern Powergrid (Yorkshire) Plc regarding protective provisions to be included in Schedule 9 of the draft DCO [AS-003] with a view to agreeing protective provisions for Northern Powergrid (Yorkshire) prior to the close of the Examination.

25.1.3. In line with Government Guidance "*Guidance on the content of a Development Consent Order required for a Nationally Significant Infrastructure Project"*, the Applicant is seeking to ensure that the protective provisions accurately reflect the Proposed Development and does not consider it correct that Northern Powergrid (Yorkshire) Plc's preferred form of protective provisions should simply be included without being adapted appropriately for the Proposed Development.

KEADBY
NEXT GENERATION
POWER STATION
Hydrogen-enabled flexible power

A collaboration between SSE Thermal and Equinor

Appendix 1 Natural England correspondence on Keadby 3 DCO regarding ammonia critical levels at SSSIs

Date: 18 February 2021
Our ref: 335306
Your ref: EN010114

Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

T 0300 060 3900

DWD LLP on behalf of SSE Generation Ltd
6 New Bridge Street
London
EX4V 6AB

BY EMAIL ONLY

Dear DWD LLP on behalf of SSE Generation Ltd

Consultation in accordance with Section 42 of the Planning Act 2008: Keadby 3 Low Carbon Gas Power Station Project – Application For A Combined Cycle Gas Turbine (CCGT) Power Station, Comprising A CCGT Unit With A Capacity Of Up To 910 Megawatts Electrical Output (Gross), Carbon Capture And Compression Plant, A CO2 Export Pipeline Connection, And Associated Development At Land At And In The Vicinity Of The Existing Keadby Power Stations (Keadby 1 And Keadby 2), Keadby, Near Scunthorpe, North Lincolnshire

Thank you for your consultation on the above dated 20 November 2020. Please note that the information below should be read alongside our previous response dated 20 January 2021. The advice below relates to air quality only.

In our main response dated 20 January 2021, we commented that unfortunately we were unable to provide advice regarding your air quality assessment and specific queries raised at an earlier meeting within the deadline. We have now reviewed the air quality information, please find below our response for your consideration.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

SECTION 42 PLANNING ACT 2008
CONSERVATION OF HABITATS & SPECIES REGULATIONS 2017 (AS AMENDED)
WILDLIFE AND COUNTRYSIDE ACT 1981 (AS AMENDED)

Potential Air Quality Impacts During Operation

Natural England notes that the Air Quality assessment provided with the consultation has screened the proposal to check for the likelihood of significant effects from aerial emissions on the above named European sites.

Natural England is satisfied that a likely significant effect from both proposed annual and 24 hour mean nitrogen oxide concentrations can be ruled out alone at all of the designated sites in question and/or will not damage or destroy the interest features for which the SSSIs have been notified. Where a proposal is below the screening threshold alone, it must still be considered by applying the same screening

threshold ‘in-combination’ with other relevant plans or projects. Natural England notes that an in-combination assessment has not yet been provided, however, we anticipate that this will be included in the final Environmental Statement.

At the meeting held between Natural England and AECOM on 15 January 2021, Natural England agreed that we would confirm the appropriate ammonia thresholds for a number of sites. Please find our advice on this below:

- At Crowle Borrow Pits, Broughton Far Wood and Broughton Alder Wood SSSIs, lichens and bryophytes are present on site, however, they are not a reason for the SSSI designation nor an integral part of a SSSI feature. Therefore Natural England accepts that the higher threshold can be applied for these sites.
- Natural England advises that the lower threshold should be applied for Risby Warren SSSI. Lichen heath (NVC code U1a) is a SSSI feature, although it is no longer present on the site due to air pollution impacts. Lichen heath is also a feature of Messingham Heath and Manton and Twigmoor SSSIs.
- Natural England is satisfied that the higher threshold can be applied for Belshaw SSSI, as it is designated for a colony of greater yellow-rattle *Rhinanthus angustifolius*.

Natural England notes that a number of sites have been screened out from any further assessment because the process contributions (PCs) have been rounded down to a whole number, suggesting that the PCs do not exceed the 1% thresholds. Natural England does not accept this approach. Our concern is that this could lead to situations where there are multiple process contributions, for example, 1.1% + 1.3% being screened out entirely, but when added together are significant. Where any PC has exceeded the 1% threshold, this triggers the requirement for an appropriate assessment to be undertaken and/or further assessment to demonstrate that the proposed emissions will not damage or destroy the interest features for which the SSSIs have been notified.

Natural England is of the opinion that further assessment should be provided to demonstrate that the proposed ammonia emissions on Risby Warren, Messingham Heath, Tuetoes Hills, Manton and Twigmoor, Scotton and Laughton Forest Ponds, Scotton Beck Field and Scotton Common SSSIs will not damage or destroy the interest features for which the SSSIs have been notified.

Natural England is of the opinion that further assessment should be provided to demonstrate that the proposed Nutrient Nitrogen deposition rates on Crowle Borrow Pits, Risby Warren, and Broughton Far Wood SSSIs will not damage or destroy the interest features for which the SSSIs have been notified.

Natural England is of the opinion that further assessment should be provided to demonstrate that the proposed acid deposition on Scotton and Laughton Forest Ponds and Broughton Far Wood SSSIs will not damage or destroy the interest features for which the SSSIs have been notified.

Recent case law (Dutch Nitrogen ruling) makes it clear that small contributions should not be disregarded entirely. Where a site is in an unfavourable ecological state or condition or exceeds the environmental benchmarks, potential additional damaging effects will need careful justification. A key part of the assessment will be whether or not there is a real risk of the project compromising the ability to achieve favourable condition targets at the SSSI.

Finally, Natural England notes that an in-combination assessment has not yet been provided, however, we anticipate that this will be included in the final Environmental Statement.

For any queries relating to the specific advice in this letter please contact [redacted] at [redacted] any new consultations, or to provide further information on this consultation please send your correspondence to consultations@naturalengland.org.uk.

Yours sincerely

[redacted]
Yorkshire and Northern Lincolnshire Area Team
Natural England