

# H2Teesside Project

Planning Inspectorate Reference: EN070009

Land within the boroughs of Redcar and Cleveland and Stockton-on-Tees, Teesside and within the borough of Hartlepool, County Durham

The H2 Teesside Order

Document Reference: RFI-2 Response to Secretary of State Request for Information 2 (Questions 5, 7 and 8)

Planning Act 2008



**Applicant: H2 Teesside Ltd**

Date: 18 July 2025

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## **1.0 INTRODUCTION**

### **1.1 Background**

- 1.1.1 This document has been prepared on behalf of H2Teesside Limited (the 'Applicant'). It relates to an application (the 'Application') for a Development Consent Order (a 'DCO'), that was submitted to the Secretary of State for Energy Security and Net Zero ('DESNZ') on 25 March 2024, under Section 37 of the Planning Act 2008 (the 'PA 2008') in respect of the H2Teesside Project (the 'Proposed Development').
- 1.1.2 The Application was accepted for Examination. The Examination commenced on 29 August 2024 and concluded on 28 February 2025. The Examining Authority (ExA) submitted a Report and Recommendation in respect of its findings and conclusions to the Secretary of State on 28 May 2025.
- 1.1.3 The Secretary of State issued a letter dated 7 July 2025 to the Applicant (and other parties) with a request for information.
- 1.1.4 This document provides the Applicant's responses to questions 5, 7 and 8 of the Secretary of State's Letter. The Applicant's responses are set out in the table below.

**Table 1-1: Response to Secretary of State Letter dated 7 July 2025**

REF NO.	SOS – REQUEST FOR INFORMATION	APPLICANT RESPONSE
5	<p><b>Project Union and the Cowpen Bewley Arm - the Applicant, NGT and NGET</b></p> <p>In its response to the first information request, the Applicant stated that the only credible route to connect into NGT’s proposed regional hydrogen network, part of Project Union, would be via the connection points and above ground installations on the Cowpen Bewley Arm of the Proposed Development. The Applicant stated this was because ongoing work with NGT showed that an alternative connection on the Billingham Arm of the Proposed Development is no longer credible.</p> <p><b>The Applicant</b> and <b>NGT</b> should provide evidence of this work and collaboration.</p> <p><b>NGT</b> should confirm the Applicant’s assessment that the Cowpen Bewley Arm remains the only connection available as part of the Proposed Development to connect into Project Union.</p> <p><b>NGT</b> should provide information as to whether the Proposed Development being unable to connect via the Cowpen Bewley Arm would affect East Coast Hydrogen.</p>	<p>The Applicant and NGT have agreed the following joint statement, set out in italics below in response to the first part of this question. It was on this basis that the Applicant concluded that it is not currently credible to create a hydrogen connection between Billingham and Cowpen Bewley by repurposing the existing NTS pipeline.</p> <p><i>Since 2024, NGT has met with H2Teesside to discuss the subject of blending and Project Union. This has involved the sharing of technical information to support decision-making with respect to the appropriate points of connection.</i></p> <p><i>Connecting at Billingham would require the repurposing of an existing 24” NTS pipeline between the Billingham Industrial Estate AGI and Cowpen Bewley to allow for the hydrogen to connect into the rest of the Project Union network at Cowpen Bewley. However, the ability to do this without providing an alternative natural gas supply to Billingham was a concern throughout the discussions with NGT, as it would need to confirm this position with other stakeholders (and this was part of the reason therefore for the optionality within the DCO Application). Indeed, following the end of the Examination, it has now been confirmed that that existing pipeline is still at this time being used for natural gas supply, and to preserve this connection, an alternative natural gas supply would need to be provided.</i></p> <p><i>As this was a known risk, discussions between the parties therefore focussed on the provision of a new natural gas pipeline to connect Billingham to the NTS to enable repurposing of the existing 24” NTS pipeline to hydrogen service. However, the work done to inform those discussions has identified that the construction of the pipeline and an associated AGI (to allow access for pigging for integrity management) cannot practically avoid the Teesmouth and Cleveland Coast SPA and SSSI. It would also involve the crossing of a number of existing buried services.</i></p>
7	<p><b>Project Union and the Cowpen Bewley Arm - the Applicant, NGT and NGET</b></p> <p>In respect of blending hydrogen into existing natural gas pipelines, the Applicant stated that there is ‘only a single other location for blending in Teesside’.</p> <p>The <b>Applicant</b> should confirm that ‘the tie-in point in the Seal Sands area within the Order limits’ remains viable for blending hydrogen within the Teesside area and if there are any effects on this connection due to other work with NGT.</p>	<p>The tie-in point for blending at Seal Sands would take place at plot 9/16 within the Order limits. This would involve H2Teesside connecting a hydrogen supply pipeline to a compression and blending facility to be developed by NGT, which would then feed into their existing NTS pipeline.</p> <p>It has been confirmed with NGT that at this time, this remains a viable <u>connection</u> point for blending, however it cannot be confirmed that it is the location at which blending will actually take place, as NGT would need to develop other infrastructure outside of the Order limits to enable the blending to happen, including compression facilities. The development of this infrastructure requires NGT to complete its pre-FEED work, obtain planning consent and reach a land agreement with the landowner, none of which has been done.</p> <p>As such, whilst H2T can deliver hydrogen to the connection point, it is reliant on NGT delivering further infrastructure for blending to be able to happen. It is noted that the need for NGT completion of the pre-FEED work and obtaining of planning consent is also the case for any blending to take place on the Cowpen Bewley Arm.</p>

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		<p>In light of the significant outstanding steps, the connection is viable but not certain at this stage. As such, retaining the ability to connect to either option will enable NGT to undertake the work required to bring forward the most appropriate blending connection point and therefore offering the best chance for the Proposed Development to support the achievement of the substantial benefits of blending as discussed in the response to the Secretary of State's first consultation letter.</p>
8	<p>NE, HBC, RCBC and STBC should provide their without prejudice views on the proposed drafting for a new Requirement within Schedule 2, as set out below:</p> <p><i>“(1) No part of the authorised development may commence operation until a Nitrogen Deposition Assessment has been submitted to and, after consultation with Natural England, approved by the relevant planning authority.</i></p> <p><i>(2) If the Nitrogen Deposition Assessment submitted pursuant to paragraph (1) does not demonstrate that the emissions from the authorised development will not exceed 1% of the critical load of nitrogen deposition for the authorised development alone on the Teesmouth and Cleveland Coast Site of Special Scientific Interest, then a mitigation plan must be submitted to and, after consultation with Natural England, approved by the relevant planning authority.</i></p> <p><i>(3) The mitigation plan submitted pursuant to paragraph (2) could include details of—</i></p> <p><i>(a) any potential on-site mitigations;</i></p> <p><i>(b) details of how any potential mitigations are to be implemented in collaboration with other industries or landowners, including any air quality data of current emissions and modelling of emissions with the mitigation applied to evidence that emissions will be reduced sufficiently on the Teesmouth and Cleveland Coast Site of Special Scientific Interest ; and/or</i></p> <p><i>c) details of any participation in a strategic mitigation scheme, if such a scheme is established.</i></p> <p><i>(4) The undertaker must implement the mitigation plan as approved, unless otherwise agreed with the relevant planning authority following consultation with Natural England.</i></p> <p><i>(5) The undertaker must, no later than 28 days after the mitigation plan is approved, provide a copy of the approved mitigation plan to the Secretary of State.</i></p> <p><i>(6) In this requirement—</i></p> <p><i>“Nitrogen Deposition Assessment” means an assessment of the emissions from the authorised development on the Teesmouth and Cleveland Coast Site of Special Scientific Interest; and</i></p> <p><i>“mitigation plan” means a plan including details of how the proposed mitigations will not cause any net increase in nitrogen deposition (kg N/ha/yr) from the authorised development alone on the Teesmouth and Cleveland Coast Site of Special Scientific Interest”</i></p>	<p>Whilst the Applicant notes that this question is not directed to it, it wishes to provide a response to ensure its position is clear and because, without prejudice to that, it is concerned that the wording of this proposed draft Requirement is not workable and does not comply with the relevant tests (in paragraph 4.1.16 of NPS EN-1).</p> <p>The Applicant continues to maintain that such a Requirement is not necessary, as ultimately the impact from emissions from the Proposed Development will be controlled in accordance with the use of Best Available Techniques (BAT) through the environmental permitting regime, where both the EA and NE will be able to consider the appropriateness of the Applicant's design. As set out in the response to the Secretary of State's first consultation letter, the Applicant is, and will continue to, engage with the Environment Agency in respect of these matters, as part of the permitting process that is well underway in respect of the Proposed Development.</p> <p>As such, there should not be a duplication of that regime within the DCO, as set out in the NPS (paragraph 4.12.10).</p> <p>The Applicant also considers that this would set a new precedent of critical load restrictions being built into planning consents where this is not a usual occurrence – critical loads are an assessment tool to consider impacts, not a planning control.</p> <p>Furthermore, whilst the Applicant accepts that the Secretary of State will need to consider the worst-case impacts of the Proposed Development, those impacts need to be considered in the context of NPS policy and the Proposed Development status as Critical National Priority infrastructure.</p> <p>However, if the Secretary of State still considers that a Requirement is necessary, the Applicant considers that the suggested drafting provided is not precise, properly enforceable or properly related to mitigating the effects of the Proposed Development in question ; and thus does not meet the policy tests for DCO Requirements (with reference to paragraph 4.1.16 of NPS EN-1).</p> <p>Specifically, the Applicant's concerns are as follows:</p> <ul style="list-style-type: none"><li>as discussed in the response to the Secretary of State's first consultation letter, NE's concerns have been in relation to the Proposed Development's contribution to a cumulative impact and the need for the cumulative impact to be mitigated. However, in the proposed Requirement, whilst</li></ul>



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		<p>paragraph (2) is focussed on whether that contribution can be avoided, the measures suggested in (3)(b) and (c) are measures that relate to addressing the cumulative issues – two separate issues;</p> <ul style="list-style-type: none"><li>• the measures proposed in (3)(b) and (c) are outside of the Applicant’s control, and are not something the local planning authority could enforce, if the inability to collaborate is the result of a third party, rather than the Applicant;</li><li>• it is not appropriate in a Requirement to use the language of ‘could’ or ‘reduced sufficiently’ – it provides uncertainty of what is actually required to be done. The focus should be on an outcome to be achieved;</li><li>• the measures referenced in 3(b) are only framed in the context of reducing emissions. However, this omits potential solutions such as habitat management or management of other pressures within the SSSI that could be agreed with Natural England as ways to improve the resilience of the SSSI to nitrogen deposition and achieving what should be the ultimate outcome – to ensure that the ability of the SSSI to reach favourable condition is not compromised;</li><li>• paragraph (2) references the ‘critical load’ but does not specify which critical load should be used – it was agreed with Natural England that a minimum critical load for calcareous sand dunes of 1% of 10 kg/N/ha/yr was the appropriate measure to be used</li><li>• the Requirement refers to the authorised development as a whole, when the matter in consideration relates to the operation of the hydrogen production facility (Work No. 1); and</li><li>• the definition of ‘mitigation plan’ is concerning as:<ul style="list-style-type: none"><li>○ the thrust of the drafting appears to be seeking the achievement of an outcome that there not be <u>any</u> net increase in nitrogen deposition from the Proposed Development. This will not be possible given the nature of the Proposed Development, and is not a requirement in any planning or environmental policy – indeed if a precedent were set with such wording and applied more broadly to other developments, it would likely stifle any new non-electricity generating plants from being brought forward. It is therefore not reasonable in planning terms;</li><li>○ the outcome of the definition of the mitigation plan (i.e. no net increase) differs from the starting point of the Requirement, which is in relation to the Proposed Development’s interaction with critical load levels, meaning the Requirement would not be internally consistent; and</li><li>○ the language is potentially confusing as it refers to details of how the proposed <u>mitigations</u> will not cause a net increase in nitrogen deposition. However, it is not the mitigations which would cause the nitrogen deposition impacts.</li></ul></li></ul> <p>As such, in light of these concerns, and without prejudice to the Applicant’s overall position that a Requirement is not needed, the Applicant would respectfully suggest the following wording for any DCO Requirement sought to be imposed in relation to this matter:</p> <p><i>(1) No part of Work No. 1 may be commissioned until a Nitrogen Deposition Assessment has been submitted to and, after consultation with Natural England, approved by the relevant planning authority.</i></p> <p><i>(2) If the Nitrogen Deposition Assessment submitted pursuant to paragraph (1) does not demonstrate that the modelled emissions deposition from that part of Work No. 1 will not exceed 0.1 kg/N/ha/yr</i></p>

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		<p><i>at the calcareous sand dunes within the Teesmouth and Cleveland Coast Site of Special Scientific Interest, then the undertaker must submit a Teesmouth and Cleveland Coast Site of Special Scientific Interest mitigation plan which, after consultation with Natural England, must be approved by the relevant planning authority prior to the commissioning of Work No. 1.</i></p> <p><i>(3) In this paragraph—</i></p> <p><i>“Nitrogen Deposition Assessment” means an assessment of the modelled emissions from the proposed operation of the relevant part of Work No. 1 on the Teesmouth and Cleveland Coast Site of Special Scientific Interest that is being brought forward, taking into account the detailed design of that part of Work No. 1;</i></p> <p><i>“relevant part of Work No. 1” means the part of Work No. 1 that is the subject of the application to discharge this Requirement, and any other part of Work No. 1 that is already in operation or, if not already in operation, which has previously been the subject of an application under this Requirement; and</i></p> <p><i>“Teesmouth and Cleveland Coast Site of Special Scientific Interest mitigation plan” means a plan which sets out measures intended to demonstrate that the ability of the Teesmouth and Cleveland Coast Site of Special Scientific Interest to reach a favourable condition would not be compromised by the relevant part of Work No.1 being operated.</i></p> <p>The Applicant considers that this drafting meets the policy tests for the Requirement in that the outcomes to be delivered are clear, precise and enforceable; and relate to the impacts of the development in question.</p> <p>It is noted that the wording of the definition of the mitigation plan is important, as it would still allow for a range of measures to be taken to achieve the outcome, but does not require that they are necessarily simply focussed on reducing emissions if that is not the appropriate step to be taken for the outcome to be reached. As such, the drafting could <u>not</u> be changed to ‘....compromised by the operation of Work No. 1’, as this would lead to the focus of the measures being just on how Work No. 1 is operated; instead the focus is on the outcome being reached in the context that Work No. 1 may be operational.</p> <p>Importantly, the drafting also means that there would be no confusion as to what should or should not form part of the plan as a result of what is stated in the DCO – it is simply for the Applicant to demonstrate that the outcome is achieved in a manner that it can control, to ensure that the outcome is achieved. This approach also enables the Secretary of State to make a decision in accordance with paragraph 4.3.18 of NPS EN-1 – that ‘the Secretary of State should consider the worst-case impacts in its consideration of the application and consent, providing some flexibility in the consent to account for uncertainties in specific project details’.</p> <p>To assist the Secretary of State, the Applicant shared this answer with Natural England and the local planning authorities on 14 July, and encouraged those bodies to also respond to it in their response to the Secretary of State on 18 July, to enable the Secretary of State to consider both forms of drafting and responses to it, in making his decision.</p>