





John Wheadon Head of Energy Infrastructure Planning Delivery Department for Energy Security and Net Zero

By email: Cc: <u>energyinfrastructureplanning@energysecurity.gov.uk</u> Cc:

29 April 2025

Dear Mr. Wheaden

Humber Hydrogen Pipeline (the Project) Request for a Section 35 Direction (Request) Planning Act 2008 (the Act)

1. INTRODUCTION

- 1.1 Humber Hydrogen Transmission System Ltd ("**HHTS Limited**") is writing to request that the Secretary of State for Energy Security and Net Zero ("**SoS**") grants a direction under Section 35 of the Act that the Project is of national significance and therefore should be treated as a project for which development consent is required.
- 1.2 This Request constitutes a qualifying request for the purposes of the Act and the sections of this letter below demonstrate compliance with the requirements of the Act.
- 1.3 HHTS Limited is developing a hydrogen pipeline, known as the Humber Hydrogen Pipeline (HHP) within the Humber region which would link a proposed hydrogen storage facility at Aldbrough (the Aldbrough Hydrogen Storage Project) to H2H Easington (a proposed hydrogen production facility) and H2H Saltend (a proposed hydrogen production facility at Saltend Chemicals Park) together with a crossing under the River Humber which would enable further future connections to the hydrogen pipeline on the south bank of the River Humber ("the **Project**"). HHTS Limited, the proposed applicant for development consent for the Project, is a partnership between Equinor, SSE Thermal and Centrica Energy Storage+.
- 1.4 The main objective of the Project is to convey low carbon hydrogen and connect these production and storage facilities. The Project will also be designed to facilitate connections to industrial off-takers and to accommodate additional demand connections and new sources of hydrogen production to enable the growth of a development of the hydrogen market in the Humber region. The Humber is a carbon-intensive



industrial region with a unique geology ideal for hydrogen storage and planned hydrogen production, and so the Humber can deliver cost-effective decarbonisation.

1.5 Therefore, the Project will deliver a critical component of the Government's hydrogen and decarbonisation strategy by connecting planned hydrogen storage, hydrogen production facilities and hydrogen off-takers. Further information on the national planning and energy policy support for the Project is set out at section 7.

2. THE PROPOSED DEVELOPMENT

- 2.1 The key components of the Project are:
 - 2.1.1 circa 50km of hydrogen pipeline connecting hydrogen production and storage comprising the following:
 - (a) a hydrogen pipeline from Aldbrough Hydrogen Storage to Burstwick;
 - a hydrogen pipeline from Saltend Chemicals Plant to Burstwick; (b)
 - (c) a hydrogen pipeline from Easington Terminal to Burstwick; and
 - (d) a terminus at the south bank of the River Humber, together with a pipeline crossing of the River Humber from a location in east Yorkshire to a landfall on the south side of the River Humber in North Lincolnshire (the "Proposed Development")
 - 2.1.2 above ground installations (AGIs) along the hydrogen pipeline corridor;
 - 2.1.3 block valve installations:
 - 2.1.4 pigging facilities; and
 - 2.1.5 tie-in isolation and safety systems
- 2.2 HHTS Limited requests that the Section 35 direction confirms that the Proposed Development is to be treated as development for which development consent is required.

3. REASON FOR THE REQUEST

NSIP Thresholds

- 3.1 The Proposed Development currently meets the threshold to qualify as a Nationally Significant Infrastructure Project ("**NSIP**") pursuant to sections 14(1)(g) and 21 of the Planning Act 2008 (as amended) as the construction of a pipeline other than by a gas transporter. The Proposed Development falls within these sections as it will be:
 - 3.1.1 a cross-country pipeline;
 - 3.1.2 a pipe-line the construction of which would (but for section 33(1) of this Act) require authorisation under section 1(1) of the Pipe-lines Act 1962; and
 - 3.1.3 the pipeline is wholly within England.
- 3.2 Therefore, the Proposed Development currently meets the criteria as set out in section 21 of the Planning Act 2008.
- 3.3 However, prior to the construction of the Proposed Development, HHTS Limited may need to apply for a gas transporter licence. Section 135 of the Energy Act 2023 allows the Secretary of State to make



regulations in relation to persons who must make an application for a gas transporter licence and the timing of such application. At the time of this Request no regulations have been yet. However, if such regulations come forward HHTS Limited may need to apply for a gas transporter licence within the prescribed time period. In any event, a licence would be required ahead of operation of the pipeline. At the point this licence is granted, the Project would no longer be able to rely on section 21 of the Act (as HHTS Limited would be a gas transporter) and would instead need to rely on section 20 of the Act (Gas transporter pipelines).

- 3.4 Section 20 of the Act states that the construction of a pipeline by a gas transporter is a NSIP within section 14(1)(f) of the Act if (when constructed) each of the following conditions are expected to be met:
 - 3.4.1 The pipeline must be wholly or partly in England (criterion 1);
 - 3.4.2 Either:
 - (a) the pipeline must be more than 800 millimetres in diameter and more than 40 kilometres in length; or
 - (b) the construction of the pipeline must be likely to have a significant effect on the environment (criterion 2);
 - 3.4.3 The pipeline must have a design operating pressure of more than a 7 bar gauge (criterion 3); and
 - 3.4.4 The pipeline must convey gas for supply (directly or indirectly) to at least 50,000 customers, or potential customers, of one or more gas suppliers (criterion 4).
- 3.5 The first three criteria as set out in Section 20 of the Act will be met in relation to the Proposed Development.
- 3.6 However, it is not yet clear whether the Proposed Development would meet the criterion 4 of Section 20 of the Act. The reason for this is that the Proposed Development does not currently include proposed blending into the gas distribution or transmission network, and in any event the government is yet to make a decision on whether to permit the blending of hydrogen into the gas distribution or transmission network. As such, the Proposed Development would convey hydrogen to less than 50,000 customers. Therefore, it is considered likely that at the stage that HHTS Limited will be constructing the Proposed Development, criterion 4 would not be met.

Nature of the Project and Consents Required

- 3.7 Given the linear nature of the Project, it is likely that HHTS Limited would require compulsory purchase powers to ensure that it would be able to compulsorily acquire the land, and rights over land, required to deliver the Proposed Development. The Proposed Development may also require a marine licence for the crossing of the River Humber and if not consented pursuant to the Act would necessitate multiple planning applications across different local planning authority jurisdictions. In addition to planning permission, it is likely that HHTS Limited will need to obtain a range of other consents and approvals from various consenting bodies. The Project would benefit from a unified consenting process with consideration of all elements of the Project by one consenting authority to ensure consistency in assessment, determination and timing.
- 3.8 Additionally, a section 35 direction would allow the Project to benefit from the firm timescales that apply to the DCO consenting process and help avoid unnecessary delays to the delivery of the Project.



- 3.9 Paragraph 3.4.12 of for NPS EN-1 provides that there is an urgent need for all types of low carbon hydrogen infrastructure to allow hydrogen to play its role in the transition to net zero and so an expedient consenting process would help address this urgent need.
- 3.10 Beyond this, the Aldbrough Hydrogen Storage project which the Proposed Development will connect to will be consented pursuant to the Act. A section 35 direction for the Project will allow the Project to be consented pursuant to the same consenting process.
- 3.11 If the Proposed Development supplied 50,000 customers, then it would be an NSIP by virtue of Section 20 of the Act; and if the Project were promoted by an entity which did not have the benefit of a gas transporter licence, then it would be an NSIP by virtue of Section 21 of the Act. The purpose of the Act and the NSIP regime is to capture and deliver infrastructure of the nature of the Project. HHTS Limited does not consider it appropriate to circumvent the Act by virtue of technicalities.
- 3.12 Finally, similar pipeline infrastructure has been directed into the Act for similar reasons. On:
 - 3.12.1 5 July 2022 the SoS issued a Section 35 direction in respect of the HyNet Northwest Hydrogen Pipeline on the basis that criteria 4 of Section 20 of the Act may not have been met in respect of that project;
 - 3.12.2 22 December 2022 the SoS issued a Section 35 direction in respect of the H2 Teesside project, including pipeline infrastructure; and
 - 3.12.3 22 November 2024 the SoS issued a Section 35 direction in respect of the H2NorthEast Project which included pipelines on the basis that there was uncertainty as to whether the threshold in section 21 of the Act of the Act would have been met in respect of that Project.
- 3.13 Therefore, there is precedent for substantially similar infrastructure being directed into the Act pursuant to section 35 directions.

Conclusion On Reasons for Request

3.14 As the Proposed Development may not meet the criteria identified in Section 20 or Section 21 of the Act if and when a gas transporter licence is required and obtained, HHTS Limited requests a direction pursuant to Section 35 of the Act, in order to be consented pursuant to the Act. Issuing a Section 35 direction pursuant to the Request is required to provide certainty as to the relevant consenting regime for the Project, given its national significance.

4. REQUEST

4.1 For the reasons set out above, HHTS Limited requests that a direction pursuant to section 35 of the Act be granted in relation to the Proposed Development to ensure that, from the point at which HHTS Limited may obtain a gas transporter licence and become unable to rely on section 21 of the Act, there is no uncertainty in relation to the Proposed Development's designation as an NSIP.

5. ASSOCIATED DEVELOPMENT STATUS

- 5.1 Certain works may be consented as associated development pursuant to Section 115 of the Act.
- 5.2 There is detailed Government guidance on what may constitute associated development for the purpose of the Act in the Ministry of Housing, Communities and Local Government Guidance "Planning Act 2008:



associated development applications for major infrastructure projects" (26 April 2013) (the "AD Guidance").

- 5.3 Any application for development consent is expected to include all the elements of the Project, including those elements that constitute the Proposed Development, the associated development (as defined by section 115 of Act) to the Proposed Development and ancillary development.
- 5.4 The AGIs, block valve installations, pigging facilities and tie-in isolation and safety systems associated with the pipeline:
 - 5.4.1 have a direct relationship with Proposed Development because they are necessary to convey the hydrogen and support the operation of the Proposed Development;
 - 5.4.2 are subordinate to the Proposed Development;
 - 5.4.3 are necessary to allow the purpose of the Proposed Development to be achieved and so are not included
 - 5.4.4 for additional review or to provide cross-subsidy; and
 - 5.4.5 are considered to be proportionate to the scale to the NSIP itself.
- 5.5 The AD Guidance includes as an example of associated development specific to gas transporter pipelines (in Annex B): "Above ground installations such as pumping/booster stations, compressor and/or regulator stations" – these cover the two types of associated development being proposed.
- 5.6 Therefore, it is considered that the AGIs, block valve installations, pigging facilities and tie-in isolation and safety systems associated with the Proposed Development are all properly capable of being consented as associated development.

6. QUALIFYING REQUEST

- 6.1 The Request is a qualifying request for the purposes of Section 35ZA(11) of the Act.
- 6.2 For the purposes of Section 35 of the Act, HHTS Limited confirms that the development:
 - 6.2.1 forms part of a project (or proposed project) in the field of energy and so satisfies the condition in Section 35(2)(a); and
 - 6.2.2 will (when completed) be wholly in England and so satisfies the condition in Section 35(2)(b).
- 6.3 For the purposes of Section 35ZA(1) of the Act, we confirm that no application for a consent or authorisation mentioned in section 33(1) or (2) has been made in relation to the development to which the Request relates.
- 6.4 By virtue of Section 35(2)(c), the Secretary of State must think that the project (or proposed project) is of national significance, either by itself or when considered with one or more other projects (or proposed projects) in the energy field. The following section sets out the national significance of the project and the other projects in the energy field to which it relates.

7. NATIONAL SIGNIFICANCE

National Planning Policy



- 7.1 Paragraph 3.4.12 of NPS EN-1 (January 2024) states that there is an urgent need for all types of low carbon hydrogen infrastructure to allow hydrogen to play its role in the transition to net zero. The Project will help meet this need.
- 7.2 Paragraph 3.4.22 of NPS EN-1 further recognises this, and states that to support the urgent need for low carbon hydrogen infrastructure, hydrogen distribution, pipelines and storage, are considered to be critical national priority (CNP) infrastructure. Government strongly supports the delivery of CNP Infrastructure and it should be progressed as quickly as possible.
- 7.3 Paragraph 2.3.6 of NPS EN-1 provides that we need to transform the energy system, tackling emissions while continuing to ensure secure and reliable supply, and affordable bills for households and businesses. This includes increasing our supply of clean energy from renewables, nuclear and hydrogen manufactured using low carbon processes (low carbon hydrogen), and, where we still emit carbon, developing the industry and infrastructure to capture, transport and store it. The Project will deliver this transformation.
- 7.4 Paragraph 2.3.7 of NPS EN-1 recognises that low carbon hydrogen is also likely to play an increasingly significant role and Paragraph 2.3.8 of NPS EN-1 further recognises that we will need to adapt existing networks or build new ones to integrate low carbon hydrogen into the system and enable the transport and storage of carbon dioxide. The Project comprises one such network.
- 7.5 On 25th April 2024, a draft updated version of NPS EN-1 was issued for consultation. At paragraph 3.3.51 is states that low carbon hydrogen is essential to achieve the government's Clean Energy Superpower and Growth Missions and will be a crucial part of our future energy system.
- 7.6 Paragraph 161 of the NPPF (December 2024) provides that the planning system should support the transition to net zero by 2050 and support renewable and low carbon energy and associated infrastructure.
- 7.7 Paragraph 168 of the NPPF provides that when determining planning applications for all forms of renewable and low carbon energy developments and their associated infrastructure, local planning authorities should: a) not require applicants to demonstrate the overall need for renewable or low carbon energy, and give significant weight to the benefits associated with renewable and low carbon energy generation and the proposal's contribution to a net zero future.
- 7.8 National Grid Energy System Operator (NGESO) has recently consulted on its methodology for the Strategic Spatial Energy Plan (**SSEP**) which is expected to be adopted in Q4 2026. The SSEP will include hydrogen infrastructure.
- 7.9 The Project will deliver the benefits identified in national planning policy.

National Energy Policy

- 7.10 The Climate Change Act 2008 sets the UK a statutory target to reduce the net carbon account to zero (net zero) by 2050 and following the sixth carbon budget the UK has a legislative requirement to cut emissions by 78% by 2035 compared to 1990 levels.
- 7.11 The Climate Change Committee's (**CCC**) recommendations to deliver the Seventh Carbon Budget, published on 26 February 2025, recognises the important role that hydrogen will play: within subsectors, which will be difficult to electrify; and in decarbonising industrial sectors; and in power generation. This recognises the meaningful role of hydrogen four subsectors in the CCC's pathway to Net Zero: 1) chemicals, 2) glass and other minerals, 3) iron and steel, and 4) non-road mobile machinery. At section 7.7, CCC state that: "Government should fast-track low-regret hydrogen infrastructure development,



including networks and storage. These investments have long lead-times and action will need to start soon to enable them to be available from the 2030s".

- 7.12 Successive governments have published a number of strategies, white papers and action plans to achieve net zero. Many of these documents identify the replacement of natural gas with hydrogen together with associated carbon capture, as critical if the UK is to achieve the 2050 target.
- 7.13 The Clean Growth Strategy published in October 2017 (the **Clean Growth Strategy**) sets out proposals for the decarbonisation of all sectors of the UK economy through the 2020s. It explains how the whole country can benefit from low carbon opportunities, while meeting national and international commitments to tackle climate change.
- 7.14 The government's Ten Point Plan for a Green Industrial Revolution published in November 2020 (the **Ten Point Plan**) aims to make the UK a global leader in green technologies. It identifies technologies which when brought forward together will deliver significant numbers of new jobs and support the UK to ultimately address its climate change commitments by 2050. Point 3 of the Plan is to 'drive the growth of low carbon' and Government has set an aim of delivering 10GW of low carbon hydrogen production capacity by 2030, attainment of which would be supported by the Net Zero Hydrogen Fund.
- 7.15 The Energy White Paper, 'Powering our Net Zero Future', December 2020 (the **Energy White Paper**) recognises that setting a net zero target as a means of reducing the effects of future climate change requires investment and innovation and refers to the Ten Point Plan and the National Infrastructure Strategy providing a strategy for the wider energy system, which includes the delivery of a greener energy system, to include low carbon hydrogen.
- 7.16 The Industrial Decarbonisation Strategy was published in March 2021 (the **Industrial Decarbonisation Strategy**) and sets out how industry can decarbonise in line with net zero, while remaining competitive and without pushing emissions abroad. Building on the Ten Point Plan, the Strategy sets out the government's vision for a prosperous, low carbon UK industrial sector in 2050 and provides industry with the long-term certainty it needs to invest in decarbonisation.
- 7.17 The UK Hydrogen Strategy was published in August 2021 (the **Hydrogen Strategy**), alongside a Consultation on a UK Low Carbon Hydrogen Standard. It establishes the case for low carbon hydrogen and the role of hydrogen in meeting net zero, recognising that it will play an important complementary and enabling role alongside clean electricity in decarbonising the UK's energy system. Furthermore, the Hydrogen Strategy states that hydrogen is suited to use in a number of sectors where electrification is not feasible or is too costly, and other decarbonisation options are limited. Examples cited are the generation of high temperature heat, as in industrial furnaces, and long-distance, and heavy-duty transport. The Strategy sets out options for an emissions standard that defines 'low carbon' hydrogen, including a methodology for calculating GHG emissions associated with hydrogen production and a subsequent greenhouse gas emissions threshold, against which different low carbon hydrogen production pathways would be measured.
- 7.18 The Hydrogen Strategy recognises that in 2030 the UK hydrogen economy could be worth £900m and support over 9,000 jobs with a quarter of these jobs could be driven by British supply chain export.
- 7.19 Published in October 2021 the Government's Net Zero Strategy: Build Back Greener (the Net Zero Strategy) builds upon the Ten Point Plan and provides policies and proposals to keep the UK on track to meet its carbon budgets and sets out a vision for a decarbonised economy in 2050. Under the heading of 'Fuel Supply and Hydrogen' it aims to support the creation of up to 10,000 jobs by 2030 in fuel supply,



mobilise additional private and public investment of between £20 and £30 billion by 2037 and deliver 5GW of hydrogen production capacity by 2030 (with the expectation this could increase to 10 or 17GW by 2035 depending upon the role of hydrogen for heat).

- 7.20 The seventh Carbon Budget sets out the Climate Change Committee's (CCC) recommendations for the UK's sixth carbon budget, which will run from 2038 to 2042. The document is a blueprint for a fully decarbonised UK. It recognises the rapid roll-out of Carbon Capture Storage and hydrogen infrastructure at industrial sites is required when questioning whether the UK can achieve Net Zero significantly before 2050. The CCC's recommendations for the UK's seventh carbon budget continue to recognise the roll of hydrogen to achieve Net Zero.
- 7.21 The government's Hydrogen Strategy Delivery Update issued in December 2023 (the **Delivery Update**) reiterated the need for low carbon hydrogen in the UK to help deliver decarbonisation of heavy industry and transport, as well as helping to build a resilient and secure net zero energy system. The Delivery Update also recognised the economic benefits and green jobs that hydrogen, including hydrogen transportation, can deliver.
- 7.22 The government's Hydrogen Transport and Storage Networks Pathway issued in December 2023 (the **Pathway**) identified the vital role that low carbon hydrogen will play in decarbonising industrial processes that are harder or more expensive to electrify, and can provide cleaner, homegrown energy for power, transport, and potentially heating.
- 7.23 The Hydrogen Investment Roadmap published in February 2024 (the **Roadmap**) sets out the scale of the UK's ambition for the role of the hydrogen economy in meeting net zero. The Roadmap details investment opportunities across the hydrogen value chain and includes details of key elements of the UK policy framework.
- 7.24 In December 2024 the government published the Clean Power 2030 Action Plan (the Clean Power Action Plan). The Clean Power Action Plan recognises that hydrogen will need to be deployed for net zero to be reached.
- 7.25 The Clean Power 2030 Action Plan also recognises the Government is committed to designing, in 2025, new business models for hydrogen transport and storage infrastructure. The Energy Act 2023 provides the legislative framework that will underpin the delivery of the hydrogen transport and storage business models. The government is currently progressing the design of the commercial models.
- 7.26 In December 2024, the Government published the 'Hydrogen Strategy update to the market: December 2024' which sets out progress in developing policies and projects across the hydrogen value chain and looks forward to further hydrogen plans in 2025. The document sets out that "*The Government remains committed to supporting hydrogen production and kick starting the UK's hydrogen economy. We are now firmly in delivery mode, supporting production projects through the Hydrogen Allocation Rounds and working towards final investment decisions through the Carbon Capture, Utilisation and Storage Cluster Sequencing Process".*
- 7.27 The Project will enable the delivery of these key national energy policies.

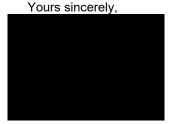


8. OTHER PROJECTS

- 8.1 The Project will connect to the proposed Aldbrough Hydrogen Storage facility. This facility is expected to be in operation by the early 2030's, with an initial expected capacity up to 420 million cubic metres capacity across up to nine storage caverns, and the Project will connect this facility to planned production to create a hydrogen network.
- 8.2 The Project will connect the Aldbrough Hydrogen Storage facility to H2H Easington (a proposed hydrogen production facility promoted by Centrica Energy Storage+ and Equinor for which a planning application is being pursued) and H2H Saltend (a proposed hydrogen production facility at Saltend Chemicals Park promoted by Equinor which has the benefit of a planning permission).

9. CONCLUSION

- 9.1 As set out, the Project is of national significance and will play a crucial role in achieving the Government's objectives of transitioning to a low carbon hydrogen economy.
- 9.2 By progressing the Project through the Act, it would provide the certainty of a single, unified consenting process with a fixed timescale for determination. It will reduce the need to apply for separate consents and it will also remove the potential requirement to make one (or more) separate compulsory purchase orders. In addition, the Project will benefit from being assessed comprehensively at the same time, through the same clear process and in a consistent manner by the same decision maker. The EIA process would also be streamlined, and it will also simplify the consideration of any likely significant environmental effects for the Project, by ensuring the Project is considered comprehensively by a single decision maker.
- 9.3 We look forward to receipt of your response.



lan Livingston

Director, HHTS Limited