

<b>EN070008: Viking Carbon Capture and Storage Pipeline</b>	Robert Palgrave, Interested Party No. <b>20047054</b>
Development Consent Examination	Response to Deadline 1

COMMENT 1- ExA question to Applicant

*1.4.6 Applicant Emissions from Operation*

*ES Chapter 15 [APP-057, paragraph 15.7.19] states that all operational omissions of the Proposed Development are attributed to electricity usage. It is not stated why the operational assessment excludes the venting of CO2 during maintenance or emergency scenarios, or the potential for fugitive emissions [APP-057]. The Applicant is requested to provide clarity on this matter and additional justification and any supporting evidence as to the criteria used to be able to scope this matter out. Why has a contingency figure not been applied for venting and venting emissions and what would the worst-case tonnes of carbon dioxide equivalent be from the Proposed Development with that contingency added?*

It is essential that this issue is fully explored. At the very least the ES for this development should put forward for examination an estimate of the likely extent of CO2 venting, so the effect on climate change can be assessed. I note that the recently made development Consent Orders for Drax BECCS and Net Zero Teesside set an expectation that at least 90% of the CO2 from burning gas and biomass respectively is to be captured for transference to the Transport & Storage Infrastructure elements of CCUS. It would therefore be reasonable to at least set targets for both venting and leakage from this proposed development so that there is some consistency in approach

However, it would be preferable in my view for there to be an arrangement whereby the Transport element of a CCUS chain (such as this proposed development of a pipeline) can signal to upstream sources of CO2 when it is necessary for them to stop creating and dispatching CO2 because the Transport (or Storage) elements of the CCUS chain are not operational. This could be when venting is scheduled for routine maintenance or when a fault condition or accident has occurred.

COMMENT 2 – Technical viability of the LOGGS offshore pipeline

The proposed development intends to connect to the existing Loggs pipeline in order to transfer and store CO2 in the Viking depleted gas field.

I draw your attention to the following comment relating to the choice of undersea storage for the Northern Endurance Partnership CCUS scheme:

July 2021

*“The project initially evaluated two offshore CO2 stores in the SNS: ‘Endurance’, a saline aquifer formation structural trap, and ‘Hewett’, a depleted gas field. The storage capacity requirement was for either store to accept 6+ MTPA CO2 continuously for 25 years. The result of this assessment after maturation of both options, led to Endurance being selected as the primary store for the project.*

*This recommendation is based on the following key conclusions:*

*The storage capacity of Endurance is 3 to 4 times greater than that of Hewett  
The development base cost for Endurance is estimated to be 30 to 50% less than Hewett.*

*CO2 injection into a saline aquifer is a worldwide proven concept, **whilst no benchmarking is currently available for injection in a depleted gas field in which Joule-Thompson cooling effect has to be managed via an expensive surface CO2 heating solution”***

[emphasis added]

[https://assets.publishing.service.gov.uk/media/6294fd78e90e07039e31b782/NS051-EN-PLN-000-00007-Technology\\_Plan.pdf](https://assets.publishing.service.gov.uk/media/6294fd78e90e07039e31b782/NS051-EN-PLN-000-00007-Technology_Plan.pdf)

In the light of the highlighted point could you ask the Applicant to comment on the viability of using the Viking depleted gas field?

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COMMENT 3 – Economic viability of the proposed development.

I draw your attention to the following point made by the Secretary of State in their Decision letter refusing consent for the Yorkshire and Humber Cross Country Pipeline.

Would you please ensure that the Applicant in this case is required to show that there is a reasonable likelihood of the Development forming a full part of a full chain of CCS?

Decision Letter 11 January 2017

APPLICATION FOR DEVELOPMENT CONSENT FOR THE YORKSHIRE  
AND HUMBER CARBON CAPTURE AND STORAGE CROSS COUNTRY  
PIPELINE

*“4.3 The Secretary of State notes that the need for energy from fossil-fuel generation and the facilities related to it is set out the Overarching National Policy statement for Energy (EN-1). The NPS sets out the matters that must be taken into consideration when determining applications for development consent for relevant infrastructure and how they should be weighed in the balance. Of particular relevance to the Application is paragraph 3.6.5 of EN-1 which provides support for CCS demonstration projects showing the full chain of CCS involving the capture, transport and storage of CO<sub>2</sub>. The Secretary of State considers that EN-1 provides support for CCS infrastructure where it is demonstrated that there is a reasonable likelihood of it being used by emitters as part of the full chain of CCS. **The Secretary of State considers that EN-1 does not provide support for CCS transport infrastructure in isolation and it is necessary for the Applicant to show that there is a reasonable likelihood of the Development forming part of a full chain of CCS”***

[emphasis added]

<https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN070001/EN070001-003920-Secretary%20of%20State%20Decision%20Letter%20including%20the%20Statement%20of%20Reasons.pdf>