Carbon Capture and Storage ('CCS') Network Code CCS001: Clarification of CO2 Venting Between Metering Point and Delivery Point

Decision:	The Authority[1] directs this modification to be made[2]
Target audience:	CCS Network Code Modification Panel, Parties to the CCS Network Code and other interested parties
Date of publication:	5 November 2025
Implementation date:	6 November 2025

Background

In carbon dioxide transport and storage ('T&S') networks, there will be instances where Users connecting to the T&S Network may have a Delivery Point[3] that is not immediately downstream from their Metering Point.[4]

Where Non-Compliant CO2[5] is detected in any carbon dioxide flows intended for delivery onto the T&S Network, Transport and Storage Companies ('T&SCos') may refuse to accept delivery at the Delivery Point. In these circumstances, the section of pipework between the Metering Point and Delivery Point may be isolated, potentially resulting in Non-Compliant CO2 being trapped.

To resume the flow of carbon dioxide onto the T&S Network, in accordance with Annexure H 'Isolation Procedure Terms of Reference', which sets out the responsibilities of T&SCos and Users relating to isolation in the event of confirmed Non-Compliant CO2, the User must confirm that the carbon dioxide is no longer Non-Compliant CO2. This may necessitate the removal of such Non-Compliant CO2 from the section of pipe prior to the Delivery Point.

[1] References to the "Authority", "Ofgem", "we" and "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day-to-day work. This decision is made by or on behalf of GEMA.
[2] This document is notice of the reasons for this decision as required by section 31 of the Energy Act 2023.
[3] As defined in Section K of the CCS Network Code, the Delivery Point means "the point of connection between a User Facility and the T&S Network at which point a User will deliver carbon dioxide into the T&S Network."
[4] As defined in Section K of the CCS Network Code, the Metering Point means "the point, co-located with the User's Delivery Point or located between the User Facility and the Delivery Point, where the Measurement Equipment is located."
[5] As defined in Section K of the CCS Network Code, Non-Compliant CO2 means "carbon dioxide which does not comply with the requirements regarding the specification of carbon dioxide under the Entry Provisions, as set out in the Measurement Requirements."

Section F Paragraph 10.11 of the CCS Network Code (the 'Code') prohibits the off-take of carbon dioxide between the Metering Point and Delivery Point. Where removal of carbon dioxide is necessary, this creates a conflict with the provisions of Annexure H 'Isolation Procedure Terms of Reference'.

Additionally, Section F Paragraph 10.11 also prevents the off-take of carbon dioxide to facilitate both routine and emergency maintenance of the section of pipework between the Metering Point and the Delivery Point.

The modification proposal

On 30 June 2025, Protos ERF CCS Ltd (the "Proposer") raised modification CCS001. The modification proposal would permit venting between the Metering Point and the Delivery Point. Venting would facilitate maintenance and allow the removal of Non-Compliant CO2 to prevent it entering the T&S Network and enable Users to resume the flow of carbon dioxide onto the T&S Network.

The Proposed Solution sets out that any carbon dioxide vented between the two points would be the responsibility of the T&SCo for the purposes of UK Emissions Trading Scheme (ETS) liabilities, but that the T&SCo would be reimbursed by the User that has vented carbon dioxide. The Proposed Solution would also require the User to report to the T&SCo the volumes of carbon dioxide vented between the two points, using a method compliant with the UK ETS Legislation and Guidance.

During the Modification Process for CCS001, the Department for Energy Security and Net Zero (DESNZ) proposed several amendments to the Proposer's Solution that were agreed by the Workgroup members to be incorporated to the Proposed Solution.

CCS Network Code Modification Panel[6] recommendation

At the CCS Network Code Modification Panel meeting on 10 September 2025, the CCS Network Code Modification Panel unanimously considered that CCS001 would better facilitate the CCS Network Code objectives, and the Panel therefore recommended its approval.

Our decision

We have considered the issues raised by the modification proposal and the Final Modification Report (FMR) dated 11 September 2025. We have considered and taken account of the responses to the industry consultation on the modification proposal which are attached to the FMR.[7] We have concluded that:

- implementation of the modification proposal will better facilitate the achievement of the relevant objectives of the CCS Network Code[8]
- directing that the modification be made is consistent with our principal objectives and statutory duties.[9]

Reasons for our decision

We consider this modification proposal will better facilitate the CCS Network Code objectives (a) and (b).

(a) the safe, economic, efficient and effective development and operation of the T&S Network to which the licence relates (as well as the coordinated, safe, economic, efficient and effective development and operation of the carbon dioxide transport and storage networks of one or more other T&S Licensees where relevant);

[6] The CCS Network Code Modification Panel is established and constituted from time to time pursuant to and in accordance with the CCS Network Code Modification Rules.
[7] CCS Network Code modification proposals, modification reports and representations can be viewed on the Carbon Capture and Storage Network Code.
[8] As contemplated by Standard Condition B5 ("CCS Network Code") and set out in Standard Condition A1 ("Definitions for the standard conditions") of the Carbon Dioxide Transport and Storage Licence, available at: Licences and licence conditions | Ofgem
[9] The Authority's statutory duties are wider than matters which the Panel must take into consideration and are detailed in the Energy Act 2023 as amended.

The Proposer considers that CCS001 has a positive impact on objective (a) by preventing Non-Compliant CO2 from entering the T&S Network. The Proposer states that this would help prevent issues that may otherwise be contributed to by Non-Compliant CO2 entering the T&S Network, such as pipeline corrosion. The Proposer also believes that enabling venting would facilitate safe maintenance and inspection of the pipeline infrastructure.

All responses to the consultation supported the Proposer's view that there was a positive impact of CCS001 on objective (a). One respondent specifically noted that CCS001 would provide Users with an efficient and effective means to both achieve and demonstrate compliance before resuming the flow of carbon dioxide onto the T&S Network.

We agree with the Proposer that this modification will better facilitate relevant objective (a) by introducing exceptions to the current requirement that all carbon dioxide passing through the Metering Point must subsequently be delivered to the Delivery Point. By allowing venting of confirmed Non-Compliant CO2, this modification would help prevent such gas from entering the T&S Network and potentially causing damage. Furthermore, it enables Users to remove trapped Non-Compliant CO2 from the relevant section of pipework, supporting a more efficient and effective reconnection process for Users once they are compliant.

(b) the economic, efficient and effective discharge of the Licensee's obligations under the licence

The Proposer believes that this modification has a positive impact on the relevant objective (b) by ensuring the T&SCo complies with its obligations as a reasonable and prudent operator. The Proposer notes that this modification allows the prudent operation of the T&S Network by assisting the T&SCo in the prevention of any damage or disruption to the T&S Network.

While no consultation respondents commented specifically on this objective, all expressed general support for the Proposer's assessment.

We agree that this modification positively supports the economic, efficient and effective discharge of the Licensee's obligations under the carbon dioxide transport and storage licence (the "Licence") by assisting the T&SCo in the prevention of damage or disruption to the T&S Network. Under the Standard Condition B5.5(b) of the License, the Licensee is required to comply with the CCS Network Code. Within the Connection Agreement, each T&SCo and User

commits to perform their duties under the Code in accordance with the standard of a Reasonable and Prudent Operator. We therefore believe that this modification can be seen as better supporting the T&SCo in meeting this obligation by facilitating an efficient and economic reconnection of the User to the T&S Network without the delivery of Non-Compliant CO2 onto the T&S Network.

Reflections on CCS001

CCS001 is the first Modification Proposal raised under this Code and represents a significant milestone for the sector. We wish to offer some reflections on the process this modification has followed, as well as considerations for its future implementation.

We acknowledge the expedited nature of the modification process for CCS001, which reflected the time pressures faced by market participants. This approach was supported by Modification Panel members, Workgroup members, and consultation respondents. However, we would emphasise that the expedited process should not be viewed as a precedent for how future CCS Network Code Modification Proposals should be progressed. We also expect continuous improvement of the Modification Proposal development process to ensure the quality of outputs as the Modification Panel gains more experience discharging its duties under the Code.

We further note that CCS001 permits venting to remove Non-Compliant CO2 from the section of pipework between the Metering Point and Delivery Point where it is the only technically viable option for a User to meet their obligations under the Code. We recognise that the CCS sector is nascent and evolving, with the potential for technologies to advance. As such, we recommend that the workability of this provision be kept under review and encourage the industry to explore potential alternatives to venting for the removal of carbon dioxide from the relevant section of pipework.

Decision notice

In accordance with Standard Condition B5 ("CCS Network Code") of the Carbon Dioxide Transport and Storage Licence, the Authority has decided that modification proposal CCS Network Code CCS001: 'Clarification of CO2 Venting Between Metering Point and Delivery Point' should be made.

Giorgia Albieri

Head of CCS Policy

Signed on behalf of the Authority and authorised for that purpose