



CCS NETWORK CODE MODIFICATION FORM

1 PERSONAL DETAILS

Proposer Name	Helen Moon
Organisation	Protos ERF CCS Limited
Company Type	Third Party Participant
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2 MODIFICATION PROPOSED

Modification Title:	Clarification of CO ₂ venting between Metering Point and Delivery Point
Description of Modification Proposal:	Clarification of Section F Paragraph 10.11 to confirm venting of gas between the Metering Point and the Delivery Point is permitted in order to protect the T&S Network from potential off-spec CO ₂ and enable compliance with the Annexure H – Isolation Procedure Terms of Reference 1(a)(iii) <i>“the requirement for cross-party proof of isolation integrity. i.e., proving zero energy;”</i>
Proposed Solution:	The proposed solution is to amend Section F Paragraph 10.11 to allow venting between the Metering Point and the Delivery Point in these circumstances. The solution will also include additional consequential amends which can be found in more detail in Appendix A below. The key amendments are summarised below: Amend Paragraph 10.11 in Section F to allow User to vent CO₂ between the Metering Point and the Delivery Point in order to prevent Non-Compliant CO₂ from entering the T&S Network and enable compliance with Annexure H. <i>Allocation of ETS Liabilities</i> Incorporate within Paragraph 4.7 Section J a provision which clarifies that any CO₂ vented between the Metering Point and the Delivery Point, in order to prevent Non-Compliant CO₂ from entering into the T&S Network, remains the responsibility of the User for the purposes of ETS liabilities. <i>Disclosure Requirements</i>

	Require Users to report the volume of CO₂ vented between the Metering Point and the Delivery Point including details of the calculations used to measure such volumes. <i>Adjustment to Flow Charges</i> Amend the flow charge calculation methodology and CDS procedure to account for vented CO₂ volumes, ensuring that charges reflect only the net volume delivered into the T&S Network.	
Case for change:	For Users that do not have the Delivery Point immediately downstream of the Metering Point there will be a length of pipework between the Metering Point and the Delivery Point. One example of the conflict in the drafting is that in the case that the Measurement Equipment detects an off-spec CO₂ event, the valves at the Metering Point will close, as well as those at the AGI. This will leave a section of pipework containing potentially off-specification CO₂. The drafting of 10.11 creates a potential conflict with Annexure H Isolation Terms of Reference as venting of this section of pipework would be required prior to reconnection as there is no method of removing this gas from the pipework between the Metering Point and the Delivery Point without allowing the potentially off specification CO₂ to enter the T&S Network. Further, depressurisation of the pipework is required to allow inspection and maintenance activities prior to which there will be a requirement to prove zero energy in the system as described in Annexure H. Therefore, to prevent potential damage to the T&S Network and clarify the Code drafting the amendment to this clause is required.	
How does this Modification Proposal better achieve the Relevant Objectives:	Relevant Objective	Identified Impact
	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	Positive – The Modification Proposal supports this Objective by acting to prevent off specification CO ₂ from entering the network. This therefore supports the Objective for keeping the Network intact preventing issues due to corrosion that may otherwise be contributed

	one or more other T&S Licensees where relevant)	to by the off-specification gas entering the Network. Secondly venting allows for safe maintenance and inspection activities.
	The economic, efficient and effective discharge of the Licensee's obligations under the licence	Positive – Ensures that the T&SCo is complying with its obligations to prudently operate the T&S Network by assisting the T&SCo in the prevention of any damage or disruption to the T&S Network
Background Information: (Optional)	For the Protos CCS project the AGI (Delivery Point) is not co-located within the User Carbon Capture Facility. This means that there is a ~500m length of CO₂ export pipework between the Metering Point and the Delivery Point. Therefore, in some scenarios following isolation there will be a requirement to vent the CO₂ in this export pipe to prevent it entering the T&S network. One example of this is when off-specification CO₂ has been detected and the plant acts to close the valves at the Metering Point. Without allowing the 'trapped' potentially off-specification CO₂ to be vented there would be no alternative than to allow this gas into the Network when the CC Facility is reconnected to the Network and the valves at the Metering Point and Delivery Point open. Also in the design life of the Facility there will be requirement to undertake inspection and maintenance activities requiring Isolation and venting of this pipework.	

3 CODE IMPACTS

Which parts of the code does this Modification impact:

Section:	Sections F, H, J – Please see Appendix A below
Exhibits:	N/A
Annexures:	N/A

4 DRAFT LEGAL TEXT AND IMPACTS



Draft legal text (optional)	Draft Legal Text for this Modification can be found in Appendix A below.
CCS Network Code baseline version	CCS V1.0 - January 2025 version. See link here .
Impact on Users and T&SCos (optional)	For Users that have their Delivery Point within their own Facility Site or immediately adjacent, and therefore have minimal pipework between the Metering Point and the Delivery Point this Modification will have no impact. For T&SCo's this modification will have a positive impact as it will allow them to prevent potential off-specification gas being introduced into the Network under the above circumstances. For Protos ERF CCS Ltd and other future Users that may have an offsite Delivery Point and therefore have a length of CO₂ export Pipework between the Metering Point and the Delivery Point, this will clarify the mechanism to enable reconnection to the T&S Network after an out of specification event and permit routine maintenance and inspection activities.

5 SELF-GOVERNANCE

Should the Modification be Self-Governance/Fast Track Self Governance/?	No
Rationale for Self-Governance:	N/A

6 REGULATOR/SECRETARY OF STATE IMPACTS

Does this Modification impact a Significant Code Review?	No
Modification directed by the Regulator?	No



Does this Modification impact an existing SoS Modification Proposal?	No
Modification directed by the SoS?	No

7 TIMEFRAMES AND PROGRESSION

Do you consider this Change Proposal should be treated as an Urgent Modification Proposal	No
Justification for Urgent Modification Proposal:	N/A
Are there any required timescales for the development of this Modification?	This modification should be progressed quickly as it has been directed by the Regulator that this matter cannot be dealt with via a Derogation to the Protos CC Connection Agreement and therefore the only route to secure the required change is via a Network Code Modification. The mechanism of reconnecting to the T&S Network after an out of specification event is vital for the successful operation of the Network. This modification should proceed efficiently through the process to ensure the detailed design carried out on the Protos ERF CCS Project as well as the Protos Spur pipeline (T&SCo works) is carried out on the correct basis to prevent any delay in the projects achieving their key dates This Modification will also provide clarity to Track 1 Expansion Future Users in the development of their projects. The outcome of the Modification should be targeted to be incorporated into the November 2025 issue of the Network Code.
Proposers preference on Modification progression path:	No preference

8 ATTACHMENTS

List any attachments or supporting documents to be considered with this Modification Proposal	N/A
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APPENDIX A – AMENDMENTS TO NETWORK CODE

Principle	Objective of amendment	Section	Suggested amendment	Status
Express right for Users to vent CO ₂	To ensure Users are able to vent CO ₂ prior to injection into the T&S Network, in order to prevent Non-Compliant CO ₂ from entering the T&S Network and enable compliance with the Annexure H – Isolation Procedure Terms of Reference 1(a)(iii) <i>“the requirement for cross-party proof of isolation integrity. i.e., proving zero energy;”</i>	F10.11	Amend paragraph 10.11 in Section F to clarify that Users may vent CO ₂ between the Metering Point and the Delivery Point, for the purpose of preventing Non-Compliant CO ₂ from entering the T&S Network and enable compliance with Annexure H.	
Measuring quantity of vented carbon dioxide	All CO ₂ vented between the Metering Point and the Delivery Point must be accurately measured and fully disclosed to T&SCo to ensure transparency, regulatory compliance, and accountability for vented volumes.	F.8	Insert a new Paragraph 8.2 in Section F to: - Require Users to calculate and report vented CO₂ volumes. - Include a formal undertaking that all reported data is true, complete, and accurate in all material respects, and not misleading.	
Recovery of ETS liability	Clarify that any ETS liabilities arising from vented CO ₂ prior to the Delivery Point are the responsibility of the User, not T&SCo.	J4.7	Amend Paragraph 4.7 in Section J by adding sub-paragraph (e) to explicitly assign ETS liability for vented CO ₂ as allowed under this Modification (i.e. not for vented CO ₂ arising as a result of a fault/damage to the infrastructure) to the User.	
Calculation of flow charges	Ensure flow charges are based on net CO ₂ volumes delivered at the Delivery Point (post-venting), not gross volumes at the Flow Meter.	F13.3 H27.1 H27.2	a) Insert a new provision in Section F13 to introduce a mechanism similar to the Measurement Adjustment process in Sections F13.1–13.3 in respect of a Flow Meter Error. b) Amend H27.1 and H27.2 to also cover a Measurement Adjustment required in order to account for the vented CO₂ volumes pursuant to limb (a) above, to require T&SCo to instruct CDS to re-process Flow Meter data to reflect vented volumes and re-issue the Processed Flow Meter Data statement accordingly.	