

Representation - Draft Modification Report 0581S

Amending the Oxygen content limit specified in the Network Entry Agreements at Grain LNG

Responses invited by: **5pm 13 May 2016**

To: enquiries@gasgovernance.co.uk

Representative:	Jeff Chandler
Organisation:	SSE
Date of Representation:	11/5/16
Support or oppose implementation?	Oppose
Relevant Objective:	d) Negative

Reason for support/opposition: Please summarise (in one paragraph) the key reason(s)

Although below GSMR levels it is still an increase of 20 times in Oxygen levels and upon inspection it seems it could have consequences for Storage facilities. As it could allow LNG terminals to reduce nitrogen blasting by replacing it with air (cheaper) resulting in a continuous stream at this new higher level.

It could lead to an increased content of Oxygen which would result in up to 20 times more water generated during the storage regeneration process resultant in higher costs to return gas to the grid, it also increases the probability of the formation of Carbonic acid. This will lead to increased corrosion which would lead to early de-commissioning of plant, or increased maintenance and refurbishment costs.

Self-Governance Statement: *Please provide your views on the self-governance statement.*

SSE does not agree that this modification is suitable for Self-Governance because it is likely to have a material effect on gas Storage Operators and their consumers whose offtake facilities are sensitive to the level of oxygen content in gas. The timescale of this modification was very compressed and it was only after internal investigation that the negative unforeseen consequences of this modification have become apparent.

Implementation: *What lead-time do you wish to see prior to implementation and why?*

A cost benefit analysis should be undertaken to assess the impact of increasing the oxygen content of gas before a decision regarding implementation is made.

Impacts and Costs: *What analysis, development and ongoing costs would you face?*

Increased corrosion of mild steel equipment. Where residual brine in a storage cavern mixes with natural gas and increased levels of Oxygen there is an increased probability of the formation of Carbonic acid. This would lead to early de-commissioning of plant, or increased maintenance and refurbishment costs.

Are there any errors or omissions in this Modification Report that you think should be taken into account? *Include details of any impacts/costs to your organisation that are directly related to this.*

A cost benefit analysis should be undertaken to assess the impact of increasing the oxygen content of gas before a decision regarding implementation is made.

Please provide below any additional analysis or information to support your representation

Although Modification 0561 allowed for the increased flow of oxygen, flows at BBL are relatively limited. Given the greater capacity for LNG imports in meeting GB demand, the issue of increased oxygen is likely to be more significant.