#### Representation - Draft Modification Report 0498 and 0502

# 0498 - Amendment to Gas Quality NTS Entry Specification at BP Teesside System Entry Point

## 0502 - Amendment to Gas Quality NTS Entry Specification at the px Teesside System Entry Point

Responses invited by: 24 July 2015		
Representative:	Jamie Unwin	
Organisation:	GrowHow UK	
Date of Representation:	20/07/15	
Support or oppose implementation?	0498 - Oppose * delete as appropriate 0502 - Oppose/ * delete as appropriate	
Relevant Objective:	a) Negative* delete as appropriate d) Negative * delete as appropriate	

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

GrowHow is the largest industrial user of Gas in the UK; we use 1% of UK gas each day (c. 2.5MCM ). Gas is both feedstock and fuel within our process; it is 68% of our variable manufacturing cost. We complete against imported material manufactured in countries with much lower Natural Gas prices. Implementation of these modifications will drive up our cost base affecting our ability to compete.

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

#### N/A

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

- Our CO2 emissions increase as the additional CO2 is emitted from our process in addition to the CO2 we are generating ourselves (this would presumably take the form of an increased emissions factor on the metered incoming gas), leading to higher costs under EU ETS.
- There would be additional load on our CO2 removal systems, which are already highly loaded at maximum production rates so this could become a limit on production rate
- Calorific value is reduced, so our volume of gas consumed needs to increase, this will increase
  pressure drop in the distribution pipework (both NG system and customers own distribution
  system)..
- The CO2 acts a diluent, so where we are trying to achieve high temperatures (e.g. in reformer furnaces) we have more mass to heat, which consumes more energy

We estimate the cost to the business to be approximately £55k pro rata for a 30 day period.

**Legal Text:** Are you satisfied that the legal text will deliver the intent of the Solution?

N/A

Modification Panel Members have requested that the following questions are addressed:

Q1: Respondents are requested to quantify any additional costs they would incur as a result of a  $CO_2$  excursion to 4.0 mol% at the Teesside terminal (flow maps are included to help respondents; see figures A2.1 to A2.4 in Appendix 2).

Additional Cost £ P.A BASED ON 30 DAYS

CO2 Emissions	£500
Production Capability	£40,000
CO2 Removal Energy	£500
Reformer Heating Energy	£8,000
Nat Gas Feed Heating Energy	£6,000

£55,000

Q2: Respondents are requested to quantify any wider benefits/dis-benefits for the UK economy that might be derived from these proposals.

We do recognise however that security of supply is paramount to the operations of our business we welcome diverse supplies into the NTS that offset dwindling UK continental shelf flows

Q3: Respondents are requested to quantify the security of electricity supply risk to CCGTs. It would be useful to know how many CCGTs could be affected, when they might be impacted and what flexibility there is elsewhere in the system to accommodate.

N/A

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.

N/A

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

N/A