

## 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**

<b>Representative:</b>	Marshall Hall
<b>Organisation:</b>	Oil & Gas UK
<b>Date of Representation:</b>	24 July 2015
<b>Support or oppose implementation?</b>	0498 - Support 0502 - Support
<b>Relevant Objective:</b>	a) Positive d) Positive

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

The two Mods will enhance UK gas supply security and supply-side competition. They will facilitate the development of known offshore gas reserves in accordance with the obligation in the UK Infrastructure Act 2015 to Maximise Economic Recovery of indigenous oil and gas resources (MER UK). The UK Continental Shelf (UKCS) is a relatively high-cost producing province; recent fiscal and regulatory reforms are designed to promote new field development and to maximise the economic benefits of remaining reserves for the entire UK economy. In particular, the new Cluster Area Allowance is designed to promote development of high-pressure, high-temperature (HPHT) fields in the Central North Sea (CNS) for which Teesside is the nearest landfall. Even without new field developments, approval of the Mods will confer benefits since they would prevent the occasional curtailment of gas production from existing fields already delivering gas to Teesside.

The Mods will extend the economic life of offshore infrastructure, the onshore terminals at Teesside and the associated NTS pipeline network to the long-term benefit of UK gas consumers. Although the Mods may lead to an increase in the average level of CO<sub>2</sub> in gas supplied in the area around Teesside, the wider impact on the entire NTS will be minimal and there is no reason to suggest the quality of gas will become more variable in the Teesside area than it is today. The financial benefit of the Mods in lower capital and operating costs for new field developments fields far outweighs the incremental costs to be borne by local gas end-users.

In addition to the strong financial case for approving the Mods, the environmental case based on CO<sub>2</sub> emissions is also favourable. If higher-CO<sub>2</sub> fields in the Central North Sea (CNS) have to be developed with high-cost onshore CO<sub>2</sub> extraction units, total national UK CO<sub>2</sub> emissions will be higher than they would be if the Mods are approved. If the Mods are approved and facilitate the development of such CNS fields, the gas produced will displace long-haul imports at the margin and will lead to a reduction in global greenhouse gas (GHG) associated with delivering gas to UK consumers.

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

We believe the Mods should be implemented as soon as practicable.

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

As an industry association, O&GUK does not face any such costs.

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

**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<sub>2</sub> 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).*

As an upstream industry association, we ourselves are not directly affected.

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

In 2014, Teesside terminals delivered 5.8 bcm to the NTS out of total deliveries of about 67 bcm or 9% of the total volume. The average CO<sub>2</sub> content of Teesside gas was 2.2mol% compared to an estimated NTS average of 1.4mol%. Offshore fields in the CNS delivering gas to Teesside are 'baseload' suppliers with no ability or incentive to modulate their output. They undertake planned maintenance, usually in the summer months, and suffer occasional unplanned outages as part of their operations.

The proposal would facilitate the development of the UK's own undeveloped gas reserves by lowering the capital and operating costs associated with their development and conferring firm network access to undeveloped, higher-CO<sub>2</sub> CNS fields. This would confer benefits to offshore resource holders, to HM Treasury through higher tax revenues and to UK domestic and industrial consumers who would have additional supply security and a local source of gas feedstock.

At present, higher-CO<sub>2</sub> fields on the Norwegian Continental Shelf are capable of development and delivery to St Fergus where two of the three terminals already have a maximum CO<sub>2</sub> content of 4.0mol%. (The average St Fergus CO<sub>2</sub> content from the three terminals is about 2.0mol% compared to 2.2mol% at Teesside). The proposed Mods would create a 'level playing field' by allowing UK offshore fields in the CNS the same advantage enjoyed by Norwegian gas producers.

We are sympathetic to the end-users in the Teesside area who would probably face higher average CO<sub>2</sub> in the gas they consume and, for those within the EU ETS, higher compliance costs. However, the data gathered by National Grid showed the effect of natural dilution in the NTS mitigates the effect of higher CO<sub>2</sub> at Teesside entry on any particular exit point from which end-users take gas. Furthermore, the identified incremental costs incurred by local end-users through operational inefficiencies and higher ETS compliance costs are relatively small under all plausible assumptions of the cost of carbon. These additional end-users costs are not to be diminished but their scale does not, in our view, provide the basis for rejecting the Mods.

*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.*

The Mods do not affect the GMSR limits and will have no discernible or material impact on CCGT operations.

We believe the claim raised in the workgroup that some end-users (including unidentified generators) would face greater short-term, within-day variability of gas quality and suffer costly trips if the Mods were approved is entirely spurious, ill-founded and should be disregarded by the Mod Panel. No data was ever presented to the workgroup regarding the variability of gas quality or the consequent alleged costs. The daily gas quality data assembled by National Grid at all major entry points and local exit points provided no support at all to these claims. The short-term, within-day variability of gas quality at any individual exit point is the result of the market-responsive fluctuations in demand and supply and the operational management of the NTS by National Grid Gas. There is simply no reason to believe that approving the Mod proposals would increase the variability of the key gas quality parameters (Wobbe index, GCV, soot index etc) at any individual exit point.

**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.*

No.

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

The workgroup gathered and considered all the data on gas flows and gas quality available in the GB market to assess the Mod applications. We believe that the evidence points to a very strong financial and environmental case for approval of the Mods. The applications deserve to be considered on their own merits. We believe that fears that approval of these Mods would set an unwelcome precedent for further CO<sub>2</sub> relaxation elsewhere are ill-founded. The applications have been based on the specific features at Teesside and of existing and prospective offshore fields in the CNS which do not apply at other entry terminals.