### **UNC Workgroup 0498 Minutes**

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

### Thursday 01 May 2014

### at ENA, Dean Bradley House, 52 Horseferry Road, London SW1P 2AF

### Attendees

Copies of all papers are available at: <u>www.gasgovernance.co.uk/0498/010514</u>

The Workgroup Report is due to be presented at the UNC Modification Panel by 20 November 2014.

### **1.0 Outline of Modification**

AC introduced the modification, explaining the intent and purpose of the change and the envisaged solution.

#### 2.0 Initial Discussion

DRa outlined the process National Grid NTS had followed in response to the original request and explained what factors had been considered and assessed. DRa indicated that provisionally there were no safety concerns, and the NTS was not compromised, and no costs were envisaged. Referring to contractual obligations for Teesside gas flows, to

date no contractual issues arising from the proposed change were identified in network analysis. National Grid NTS had written to organisations with connections to relevant parts of the network; some initial responses had been received, and these respondents are now encouraged to become involved and contribute to this Workgroup.

### Downstream Gas Quality User Concerns

JC then gave a short presentation highlighting issues and concerns identified in relation to invalidation of OEM warranty and potential restriction on future selection of suitable equipment for new sites. It was also noted that varying the gas specification would lead to a requirement for frequent and unpredictable Gas Turbine re-tuning in order to maintain combustion stability and dynamics within OEMs specification. JC explained the consequences, which could lead to an environmental breach.

JC raised a third issue regarding gas customers being charged for carbon dioxide that is inherent in the gas when it is supplied at the beach.

**Post Meeting Note:** JC confirmed that downstream customers will have to pay for any increase in CO2 supplied at the beach, and provided the following extract from COMMISSION REGULATION (EU) No 601/2012 of 21 June 2012 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council (this document can be accessed through the following link: http://eur-lex.europa.eu/legalcontent/EN/TXT/HTML/?uri=CELEX:32012R0601&from=EN)

" Article 48

### Inherent CO2

1. Inherent CO2 which is transferred into an installation, including that contained in natural gas or a waste gas including blast furnace gas or coke oven gas, shall be included in the emission factor for that fuel.

2. Where inherent CO2 originates from activities covered by Annex I of Directive 2003/87/EC or included pursuant to Article 24 of that Directive and is subsequently transferred out of the installation as part of a fuel to another installation and activity covered by that Directive, it shall not be counted as emissions of the installation where it originates.

However, where inherent CO2 is emitted, or transferred out of the installation to entities not covered by that Directive, it shall be counted as emissions of the installation where it originates.

3. The operators may determine quantities of inherent CO2 transferred out of the installation both at the transferring and at the receiving installation. In that case, the quantities of respectively transferred and received inherent CO2 shall be identical.

Where the quantities of transferred and received inherent CO2 are not identical, the arithmetic average of both measured values shall be used in both the transferring and receiving installations' emission reports, where the deviation between the values can be explained by the uncertainty of the measurement systems. In such case, the emission report shall refer to the alignment of that value.

Where the deviation between the values cannot be explained by the approved uncertainty range of the measurement systems, the operators of the transferring and receiving installations shall align the values 'inherent CO2' means CO2 which is part of a fuel;...."

JC raised a number of questions, answers to which he believed it would be prudent to establish, and it was suggested that National Grid NTS consider and provide responses to these questions.

# Action 0501: National Grid NTS to consider and provide responses to the following questions:

- a) What is the limit on the total allowable inerts in the fuel specification when the C02 limit is lifted to 4 mole %?
- b) Where is the level of inerts stated in the GSMR?
- c) What is the expected normal future gas composition (including LHV, total inerts)?
- d) What is the expected Worst future gas composition and estimated durations when this worst case gas supply would be in use (including LHV ,total inerts)?
- e) What is the anticipated rate of change of Wobbe that can be expected to be seen at an off take point?
- f) What is the expected profile of variations in gas supply quality at an take off point per hour/day/week/month/year?

### Potential Similar Modification

Interest in raising a similar modification had been expressed by another party. AH introduced himself and explained the extent of Teesside Gas Processing Plant Limited's (TGPP) interest in the proposed changes, which TGPP fully supported. High pressure high temperature fields could be developed if circumstances were right technically, and AH saw it as the correct economic way of encouraging this resource onto the system.

AH confirmed that TGPP would be raising a similar modification to address its part of the processing at this entry point, with the expectation that it be developed in parallel to this Modification 0498.

### General Comments

Shippers expressed the view that the proposal looked to be a sensible approach to bring more gas into GB, but were considering the wider implications and shared JC's concerns regarding certain elements.

It was noted this would be raising the limits compared to other terminals, and that Teesside was already one of the highest - what would be the impact on generation plant and how would that be addressed through this process? What would this mean for end consumers (power stations) and how would any issues be resolved?

PB asked if there was any feel for the longevity/significance of the issue? What were the options for gas processing if it was a long-term issue? AC referred to the alternative of building processing plant which was costly and less attractive economically and which could inhibit the development of new fields. Observing that the UKCS was a mature field, DW explained the challenging offshore building and operating environment and confirmed that it was not likely to improve. Some discoveries had not yet been able to be exploited but could be through certain ways. Quality of gas was likely to become more of an issue for GB in the future.

It was commented that increasing to 4 mole %would only be happening at specific times, not all the time. Rate of changes was seen to be more of a commercial issue. How would power stations be impacted?

It was suggested that National Grid NTS could present what gas flows/patterns down the East coast looked like, to help the Workgroup form a picture of which parties might be impacted.

# Action 0502: Present what gas flows/patterns down the East coast look like, to help the Workgroup form a picture of which parties might be impacted.

JCx believed this to be a much broader issue than at first appeared, and suggested that Ofgem might consider the wider aspects of environmental impact.

It was suggested that in terms of modelling it would be useful to see what the whole revised gas specification for Teesside will look like, or confirm if only specific parameters will be affected. DRa pointed out there would be confidentiality of information aspects to consider regarding what, if any, information might be released.

RF pointed out that Shippers had the right to formally request information, and confirmed that National Grid should consider the request made in this meeting to be a formal request and be responded to as such.

# Action 0503: *Potential revised gas specification for Teesside* – BP and National Grid NTS to produce appropriate information in response to E.ON's formal request for information made verbally at this meeting (01 May 2014).

LW commented that there would be some extremely large industrial sites that should be made aware of the potential for change. DRa confirmed that National Grid NTS had made parties aware and had encouraged them to contribute to this forum. LW suggested it would be prudent to double check and confirm which parties had been contacted, in the event that some may have been inadvertently omitted.

PB, noting that there were likely to be a number of gas quality issues arising over the next few years, asked if there were any wider considerations currently ongoing within Ofgem. LM indicated she would find out. It was also suggested that it might be beneficial for Ofgem to provide a view of any issues, as it perceives them.

# Action 0504: Ascertain if there is any internal focus within Ofgem currently being applied to the area of gas quality.

Action 0505: Provide a view of any issues, as perceived by Ofgem.

### 3.0 Any Other Business

None.

### 4.0 Diary Planning

Further details of planned meetings are available at: <u>www.gasgovernance.co.uk/Diary</u>

The next meeting will take place within the Transmission Workgroup on Thursday 05 June 2014, at the ENA, Dean Bradley House, 52 Horseferry Road, London SW1P 2AF.

Action	Table

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
0501	01/05/14	2.0	National Grid NTS to consider and provide responses to the following questions:	National Grid NTS (DRa)	By 28 May 2014
			<ul> <li>a) What is the limit on the total allowable inerts in the fuel specification when the C02 limit is lifted to 4 mole %?</li> </ul>		Pending
			b) Where is the level of inerts stated in the GSMR?		
			<ul> <li>c) What is the expected normal future gas composition (including LHV, total inerts)?</li> </ul>		
			<ul> <li>d) What is the expected Worst future gas composition and estimated durations when this worst case gas supply would be in use (including LHV ,total inerts)?</li> </ul>		
			<ul> <li>e) What is the anticipated rate of change of Wobbe that can be expected to be seen at an off take point?</li> </ul>		
			f) What is the expected profile of variations in gas supply quality at an take off point per hour/day/week /month/year?		
0502	01/05/14	2.0	Present what gas flows/patterns down the East coast look like, to help the Workgroup form a picture of which parties might be impacted.	National Grid NTS (DRa)	By 28 May 2014 Pending
0503	01/05/14	2.0	Potential revised gas specification for Teesside – BP and National Grid NTS to produce appropriate information in response to E.ON's formal request for information made verbally at this meeting (01 May 2014).	BP Gas (AC) and National Grid NTS (DRa)	By 28 May 2014 Pending

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
0504	01/05/14	2.0	Ascertain if there is any internal focus within Ofgem currently being applied to the area of gas quality.	Ofgem (LM)	By 28 May 2014 Pending
0505	01/05/14	2.0	Provide a view of any issues, as perceived by Ofgem.	Ofgem (LM)	By 28 May 2014 Pending