UNC Workgroups 0498/0502 Minutes

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

Thursday 03 July 2014

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

Attendees

Les Jenkins (Chair)	(LJ)	Joint Office
Lorna Dupont (Secretary)	(LD)	Joint Office
Andrew Pearce	(AP)	BP Gas
Andy Heppel	(AH)	TGPP
Antonio Ciavolella	(AC)	BP Gas
Charles Ruffell	(CR)	RWEst
Colin Hamilton	(CH)	National Grid NTS
David Reilly	(DRe)	Ofgem
Doug Wood	(DW)	BP Gas
Francisco Goncalves	(FG)	Gazprom
Gerry Hoggan	(GH)	ScottishPower
Graham Jack	(GJ)	Centrica
Julie Cox	(JCx)	Energy UK
Kirsten Elliott-Smith	(KES)	Cornwall Energy
Martin Connor	(MC)	National Grid NTS
Natasha Ranatunga	(NR)	EDF Energy
Nick Wye	(NW)	Waters Wye Associates
Phil Hobbins	(PH)	Gazprom
Richard Fairholme	(RF)	E.ON UK

Copies of all papers are available at: www.gasgovernance.co.uk/0498/030714

The Workgroup Report (combined 0498 and 0502) is due to be presented at the UNC Modification Panel by 20 November 2014.

1.0 Introduction and Status Review

1.1 Minutes

PH, on behalf of DRa (absent), and AH proposed the following changes be made to the previous Minutes.

Under 1.2 Actions (pages 2 and 3):

0501 - Update: d) ".......National Grid NTS polices the <u>lower limits</u> but has no influence on the value within the allowable ranges."

f) "..... Reference was made to the gas quality projections in the Interruptibility Interoperability Code and......"

and "It was observed by MH that at TSO level..."

Under 2.1 Consideration of initial representations – SSE – Issue 3 (page 4):

"If this was contravened it would go no further The applicability to GB is yet to be determined. The details of the standard were not yet known by some workgroup attendees, but would may need to be taken into account if deemed applicable and formally considered."

Under 2.1 Consideration of initial representations - Tata Steel (page 5):

"This was also reviewed and recognised as expressing concerns common to the other representations in terms of CV/Wobbe".

Under 2.2 Identification of common issues – General comments (page 5, paragraph 2):

".....it was queried what which components..."

Under 2.2 Identification of common issues – General comments (page 5, paragraph 3):

"It was questioned which power stations have these particular turbines that are affected by these limits; how many were there, and where were they located?

Relating to gas production offshore from Teesside, Given that some had already experienced curtailment...."

Under 2.2 Identification of common issues – General comments (page 6 – bullet point 1)

• "Do not develop any <u>new</u> gas fields <u>with 'high' CO₂</u> - the best option for delivering the very lowest emissions, but recognised as not being realistic"

Under 2.2 Identification of common issues – General comments (last paragraph)

"It was questioned if 4% mol provided sufficient 'headroom'? How was it arrived at? AH <u>and AC</u> responded that it was anticipated that it could approach this level some days and only from certain fields, but it was not expected to be reached <u>all the time</u>."

The changes were agreed, and the Minutes will be revised and republished. The Minutes were then approved.

1.2 Actions

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

Update: DRe requested that the action be carried over, until such time as the Ofgem lead has been appointed. He will confirm the appointment when known. **Carried forward**

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

Update: DRe requested that the action be carried over, until such time as the Ofgem lead has been appointed. **Carried forward**

0601: Issue 1: What is the impact on gas quality at the entry and exit points for a change in the CO_2 to 4% in relation to:

CV

- Wobbe
- Variability in h/d/w timeframes
- for operation (eg maintenance and performance).
- a) Provide historical/forecast data on gas quality at (i) Teesside and (ii) other entry points. (AH/AC/DRa)

Update for 0601(a): AH and AC confirmed that work is continuing; an update to be provided on 07 August 2014.

In a brief presentation, PH outlined how Shippers might obtain information on Gas Entry Condition limits.

Recognising that there may be issues of confidentiality and that some Workgroup participants may not be Users under the UNC, it was questioned what detailed information could be made available to the Workgroup for its review. It was suggested that this might be provided in an anonymised state, without referencing specific terminals. or on a case-by-case basis. National Grid NTS (DRa/PH) will discuss with Terminal Operators and confirm what can be produced/made available to help the Workgroup engage with this.

RF referred to an older document in the public domain through which certain information, perhaps pertinent to this issue, was available. PH noted this for further consideration.

Illustrative graphs had been provided by National Grid NTS, and PH then gave an overview. The first (Teesside Wobbe Index and CO_2) did not show a strong correlation; the second (Teesside CV and CO_2) showed a slightly stronger correlation. **Carried forward**

b) Availability and suitability of historical/forecast data for exit points to be evaluated. (DRa)

Update for 0601(b): National Grid NTS is to provide sample exit data at the next Workgroup meeting (07 August 2014). JCx suggested looking at the LDZs around Teesside and the levels of what was going into Rough storage. JCx also referred to MIPI and the apparent inaccessibility of CV data through this tool. **Carried forward**

c) Refine the Tata Steel question into numbers. (AH/AC)

Update for 0601(c) - AH and AC confirmed that work is continuing; an update to be provided on 07 August 2014. **Carried forward**

d) Evaluate what data can be provided about Variability. (AC)

Update for 0601 (d) - AH and AC confirmed that work is continuing; an update to be provided on 07 August 2014. **Carried forward**

All parts of Action 0601 to be carried forward to the meeting on 07 August 2014.

0602: Issue 2: What happens to the increased CO₂ after consumption in relation to:

- In a gas turbine power plant
- · Combusted for heat
- Feedstock
- Storage.

Where it is an ETS site, CO_2 passes through and impacts costs. Develop an impact assessment. (AH/AC)

Update: AH and AC confirmed that work is continuing; an update to be provided on 07 August 2014.

RF commented that E.ON had looked at this from a power generation point of view and had information that could be shared with Ofgem if necessary. The site affected may only be so in the summer months. AH reiterated that the point made in the previous meeting, that it was anticipated that it could approach 4% mol on some days (not all the time) and only from certain fields.

RF asked if Ofgem would be carrying out an environmental impact assessment. DRe recognised the concerns. **Carried forward**

0603: Issue 3: What is the impact on OEM Warranties if increased levels of CO₂/inerts are seen? Seek views from Energy UK members, regarding volumes/types/locations/limits. (JCx)

Update: JCx confirmed that she was in the process of gathering information; an update to be provided on 07 August 2014. **Carried forward**

0604: Issue 4: How does this fit with the proposed BS EN 16726? Investigate scope/impact/relevance. (AH/AC)

Update: AH and AC confirmed that work is continuing; an update to be provided on 07 August 2014. **Carried forward**

0605: *Issue 5*: What is the local impact on the DN and NTS operators?

a) Understand the network flow impacts (see the GrowHow representation) – in relation to pressure/volumes/CV shrinkage. (DRa)

Update for 0605(a): Work is continuing; an update to be provided on 07 August 2014. **Carried forward**

b) Consider any impact on IPs. (DRa)

Update for 0605(b): LJ referred to an email (text reproduced below) received by the Joint Office, from E Melen (Scotia Gas Networks), regarding potential impacts:

"Our primary concern regarding the possible increase in Carbon Dioxide levels from the NTS relates to the potential increase in corrosion in metallic mains within our lower pressure tiered systems. An increased level of carbon Dioxide would have the effect of reducing the pH of any water that may have inadvertently entered the system thereby increasing corrosion.

This issue may well be exacerbated as a result of the recent class exemption against GS(M)R issued by the HSE for gas containing oxygen up to 1%mol. Although the exemption does not specifically mention carbon Dioxide, I would expect the underlying analysis to have used assumptions for Carbon Dioxide and Hydrogen Sulphide. I would recommend that confirmation be obtained that the proposed levels of Carbon Dioxide do not undermine the technical basis, upon which the class exemption was granted.

I note that the increased level of carbon Dioxide will suppress the Wobbe Index. However, since there is no specific limit for Carbon Dioxide within GS(M)R and assuming that all requirements of GS(M)R continue to be met, I have no concerns from a compliance perspective."

This was briefly considered. NR suggested that other agencies need to get involved as this was becoming a wider issue than could be addressed by a change to the UNC. PH and DRe noted the need to engage DECC and HSE concerning these modifications.

Carried forward

0606: Issue 6: What are the alternatives (include costs)? Consider other options, including the onshore removal of CO2 to be developed, and provide a high level view on costs/advantages/disadvantages. (AC/AH)

Update: AH and AC confirmed that work is continuing; an update to be provided on 07 August 2014. **Carried forward**

2.0 Discussion

No further discussion.

3.0 Legal Text

None available for review/discussion.

4.0 Workgroup Report

The UNC Modification Panel had requested that the Workgroup offer its views/recommendations regarding Modifications 0498 and 0502 in a combined report.

The Workgroup Report (combined 0498 and 0502) is due to be presented at the UNC Modification Panel by 20 November 2014.

5.0 Any Other Business

None.

6.0 Diary Planning

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

The next combined Workgroups 0498/0502 meeting will take place within the Transmission Workgroup on Thursday 07 August 2014, at the ENA, Dean Bradley House, 52 Horseferry

Road, London SW1P 2AF. PLEASE NOTE that on this date the business of the Transmission Workgroup (including combined Workgroup 0498/0502) will be conducted <u>in advance of</u> the European Workgroup, and the Transmission Workgroup meeting will therefore start at 10:00.

Action Table - Combined Workgroup 0498/0502 (03 July 2014)

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)	Carried forward
0505	01/05/14	2.0	Provide a view of any issues, as perceived by Ofgem.	Ofgem (LM)	Carried forward
0601	05/06/14	2.0	Issue 1: What is the impact on gas quality at the entry and exit points for a change in the CO ₂ to 4% in relation to: • CV • Wobbe • Variability in h/d/w timeframes • for operation (eg maintenance and performance). a) Provide historical/forecast data on gas quality at (i) Teesside and (ii) other entry points. b) Availability and suitability of historical/forecast data for exit points to be evaluated. c) Refine the Tata Steel question into numbers. d) Evaluate what data can be provided about Variability.	a) Propose rs and NTS (AH/AC/DRa) b) NTS (DRa) c) Propose rs (AH/AC) d) BP Gas (AC)	Carried forward

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
0602	05/06/14	2.0	Issue 2: What happens to the increased CO ₂ after consumption in relation to: In a gas turbine power plant Combusted for heat Feedstock Storage. Where it is an ETS site, CO ₂ passes through and impacts costs. Develop an impact assessment.	Proposers (AC and AH)	Carried forward
0603	05/06/14	2.0	Issue 3: What is the impact on OEM Warranties if increased levels of CO ₂ /inerts are seen? Seek views from Energy UK members, regarding volumes/types/ locations/limits.	Energy UK (JCx)	Carried forward
0604	05/06/14	2.0	Issue 4: How does this fit with the proposed BS EN 16726? Investigate scope/impact/relevance.	Proposers (AC and AH)	Carried forward
0605	05/06/14	2.0	 Issue 5: What is the local impact on the DN and NTS operators? a) Understand the network flow impacts (see the GrowHow representation) – in relation to pressure/volumes/CV shrinkage. b) Consider any impact on IPs. 	National Grid NTS (DRa)	Carried forward
0606	05/06/14	2.0	Issue 6: What are the alternatives (include costs)? Consider other options, including the onshore removal of CO2 to be developed, and provide a high level view on costs/advantages/disadvantages.	Proposers (AC and AH)	Carried forward