

**UNC Workgroup 0607S Minutes  
Amendment to the Gas Quality NTS Entry Specification at the ST  
Fergus NSMP System Entry Point**

**Monday 22 May 2017**

**at Energy UK, 5-11 Regent Street, London SW1Y 4LR**

**Attendees**

Rebecca Hailes (Chair)	(RH)	Joint Office
Helen Bennett (Secretary)	(HB)	Joint Office
Amrik Bal	(AB)	Shell UK
Andrew Pearce	(AP)	BP
David Mitchell	(DM)	Chemical Industries Association
David O'Donnell	(DOD)	NSMP
David Reilly	(DR)	Ofgem
Jeff Chandler	(JCh)	(SSE)
Julie Cox	(JC)	Energy UK
Murray Kirkpatrick	(MK)	BP Gas
Phil Hobbins	(PH)	National Grid NTS
Simon Bibby	(SB)	Shell UK
Terry Burke	(TB)	Statoil

(All colleagues joined in person)

Copies of all papers are available at: <http://www.gasgovernance.co.uk/0607/220517>  
The Workgroup Report is due to be presented at the UNC Modification Panel by 15 June 2017.

## 1.0 Introduction and Status Review

RH welcomed all to the meeting advising the Workgroup that it was likely to be a lengthy meeting and asked if there was any AOB to plan in. No AOB was suggested so the meeting got started.

### 1.1 Approval of Minutes (25 April 2017)

The minutes of the previous meeting were approved.

PH advised that there is just one action misreported, Acton 0402 is to review the Precedent section and not Customer Impact – amend Action 0402

*Post meeting update:* The minutes for 25 April 2017 have been updated and republished.

## 2.0 Amended Modification (further background to the proposed change)

Ref: Action 0201, MK has submitted an amended modification which RH showed on-screen. MK advised the Workgroup that the amendment is not substantial and that, as suggested, further context has been added in section 5 around the reason why 5.5% CO<sub>2</sub> was chosen.

This amended modification has not yet been published as further amendments are expected.

DOD requested confirmation of the timeline for an amended modification.

RH confirmed to the Workgroup that, following a review of the modification, it was requested at Panel that submission of the workgroup report be deferred until September 2017 (instead of June 2017). This has been approved, though the workgroup can submit a finished report to an earlier Panel if the report is finished.

**New Action 0501:** Once it is established if there are further amendments to be submitted, RH to publish the Amended Modification.

Post meeting update: draft amendment text published under 22 May 2017 meeting page; further amendments are expected. A full amended modification will be published once further changes are received from the proposer.

**New Action 0502:** JO to confirm timeline for Amended Mod

### 3.0 Review of Outstanding Actions

**0106:** BP (MK) to clarify if other gas quality parameters are affected (CV, Wobbe and Dewpoint).

**22/05/17 Update:** some amendments to WGR (impact on CO<sub>2</sub> with water content, answered at last meeting. **Closed**

**0108:** *National Grid NTS to consider if an assessment of its operational risks is required* - PH and DB to provide a statement for inclusion in the Workgroup Report (if required).

**Update:** PH produced a slide for this action and advised the Workgroup that National Grid NTS have been conducting an asset integrity assessment, looking at two things in particular:

- 1) Potential for pipeline corrosion;
- 2) Impact on compressor operation.

Regarding corrosion, National Grid NTS wished to assess in particular any impact resulting from high CO<sub>2</sub> gas passing a salt cavern storage site. The overall conclusion is, that, provided the network remains dry there is no impact of going from 4% CO<sub>2</sub> to 5.5% CO<sub>2</sub>. Periodic excursions which allow the entry of small amounts of water that result in thin aqueous films would also not materially increase corrosion risk.

The impact would be increased with additional water ingress which would mean water was able to form pools deeper than 5mm (rather than a thin film of water on the inner walls of the pipeline), since the time the water would be in the system would be a lot longer, though this is temperature dependent. The water dewpoint limit applicable to the entry of gas from salt cavity storage sites was judged to provide sufficient protection against corrosion risk at these locations.

With regards to compressors, the issue is not CO<sub>2</sub> per se but total inerts content. Provided that total inerts content does not exceed 7% (thus nitrogen doesn't exceed 1.5% in the presence of 5.5% CO<sub>2</sub> content), it is believed the compressor operation would not be impacted.

A summary of this information has been provided for inclusion in the Workgroup Report.

**Action 0108 closed.**

SB suggested the text in the Workgroup Report may need a concluding line from NSMP, DOD agreed to send some summary sentences from NSMP to support this conclusion.

**New Action 0503:** DOD to provide some summary sentences from NSMP to SB suggestion.

Discussion was had regarding changes to the Network Entry Agreement (NEA); the NEA is a bi-lateral agreement. However, if nitrogen or total inert content is also going to be specified, this is a change which would affect shippers so the modification would need an amendment.

**New Action 0504:** Mod proposal to incorporate changes to total inerts specification, subject to NSMP's agreement - MK

**0201:** BP (MK) to look to further explain the rationale behind selection of the 5.5% CO<sub>2</sub> level.

**22/05/17 Update:** Covered by additional paragraph in amended Mod, see section 2.0. **Closed**

**0202:** National Grid NTS (PH) to look to provide another ‘worst case’ scenario based on the Shell low flow period in June 2016 (using actual CO<sub>2</sub> data and NEA upper limits) and update the analysis to include the weighted average CO<sub>2</sub> positions and the max/min daily CO<sub>2</sub> levels.

**22/05/17 Update:** Referring to slide 3 of PH slide pack, Max and Min CO<sub>2</sub> feeders, PH explained that the graph shows a relatively close correlation between max and min, probably a within day variation of 1% max seen over that period. The data presented is not average, it is actual. PH also clarified that the data relates to calendar year 2016. **Closed**

**0301:** Joint Office to contact various consumers/groups for views on the impacts on them from this proposal.

**Update:** Joint Office have contacted the following Consumer Groups:

Major Energy Users’ Council	MEUC
Energy Intensive Users Group	EIUG
and	
Chemical Industries Agency	CIA

DM from the CIA was welcomed to the meeting. The CIA is supportive of increased gas supplies into GB and thus seeks greater transparency and increased visibility in what restrictions are in place at Terminals. The CIA is in support of this modification. It was noted that Ofgem published gas quality limits at NTS entry points in 2004 although no updates had since been made.

At the request of RH, DM gave a brief outline to the group on his knowledge on the current Gas Quality Debate. There will be an Industry meeting organised by IGEM entitled Decarbonising the Gas Network which will be held on 04 July 2017 (see <http://events.igem.org.uk/events/decarbonising-the-gas-network>). The meeting will include coverage of the Gas Quality Review. RH suggested a mention at the next Transmission Workgroup and invited Julie Cox to do so if appropriate.

In response to a question from SB regarding transit times, and the time NSMP needed to prepare the plant to receive and process a slug of high CO<sub>2</sub> gas, DOD confirmed that the slug would take between 12 to 24 hours. NSMP’s predictive modeling allows them to prepare.

There began a discussion regarding the basis upon which National Grid NTS assesses its ability to offer additional flexibility on gas quality parameters as is proposed by the Modification. PH advised 5.5% was not currently a limit that could be offered everywhere and, in line with the conclusions expressed in the Workgroup report for 0498 (see <http://www.gasgovernance.co.uk/0498>) each case is assessed on its merits against whether National Grid NTS can continue to operate the network safely and efficiently and is able to continue to meet its other contractual obligations. If a UNC modification is approved to change these parameters, the mod enables the NEA amendment.

DOD stated that with regards to this modification there is no comingling; this arrangement of National Grid operated compression immediately downstream of the terminal is unique to NSMP.

In response to a question from DOD about unblended gas, PH advised that in order to support the Modification, National Grid NTS would need to be able to accept unblended gas from NSMP of worst case 5.5% CO<sub>2</sub>. He added that the exit limit to IUK of 2.5% CO<sub>2</sub> may act as a restriction on the company’s ability to accept 5.5% CO<sub>2</sub> at other connections.

AB asked how would National Grid NTS treat subsequent requests, querying on what basis decisions would be made, to which PH confirmed requests are considered on a case by case basis.

**Action 0301 Closed**

**0302:** RF to provide a statement from Storage for the WGR for next meeting

**22/05/17 Update:** Referring to the statement provided prior to the meeting by Uniper who operate the Holford Storage site, there was debate around what “current level” means in the statement.

The statement will be included in the Workgroup Report although clarification would be useful.

**Closed**

**0303:** Elaboration on the ‘Wider Considerations’ part of the Workgroup Report and what would be included in this section. AB to provide some text for the Workgroup Report.

**22/05/17 Update:** AB talked the group through a statement provided prior to the meeting highlighting that these are the views of Shell. AB will check with other producers at the terminal that they agree with the statement.

At this point in the meeting the focus remained on the statement from AB particularly the last sentence where it states “Approval of the mod May remove NGs ability to accept....”.

**Carry Forward**

JC challenged whether the mod proposal truly meets the Self-Governance criteria, quoting the section of the modification (section 3) where it says at least three times if this mod is not approved Rhum Field will close’.

The group discussed at length the section 2 Self-Governance Criteria, in the Workgroup Report to see if there is a material impact on the justification points.

The Workgroup decided that the wording in the modification in the sections relating to material impact on security of supply and Competition (criteria bb and dd) needs to be looked at. Consistency of wording throughout the modification is requested from the proposer. An update to WGR will be completed.

Part of the wording on page 22 was discussed and amendments to this section were completed onscreen. The Summary section was also challenged. Real time amendments were made to the Workgroup Report, this will be V0.10.

**0306:** MK/DOD to provide a statement to put the new scenario in to context and/or explain why it is an extreme scenario that is unlikely to occur.

**Update:** This statement is now included in the Workgroup Report. **Closed**

**0307:** SB to look at the low flow period (8 days in June 2016) to clarify the background to the event and how relevant it is to this analysis/development of further scenarios

**Update:** SB advised that this is definitely relevant but not exhaustive and there are no issues from a planned outage point of view (the issues relate to unplanned outages/trips). **Closed**

**0401:** RH to publish the Draft Workgroup Report. Workgroup members to review and suggest changes.

**Update:** Users to request a word version of the Workgroup Report should they wish it. **Closed**

**0402:** Impact on customers – the group reviewed the new updated section on precedent - **Closed**

**0404:** To make contact with DNs in the context of historic HSE class exemption relating to oxygen flow for bio-methane.

**Update:** RH confirmed that she has contacted the DNs but has not yet had any responses. **Closed**

**0405:** To assess impact on CNG Offtake. **Ref Action 0301**

**Update:** PH presented a slide to the Workgroup to cover this action, there were no questions

raised. **Closed**

**0406:** To investigate that if there is a CO<sub>2</sub> content above 4% when the gas enters the NTS, can Shippers be alerted? **Ref Action 0306**

**Update:** PH advised the Workgroup that National Grid NTS has sought clarification from Shippers as to what the notification would be used for, feedback suggests that the concern is more around Wobbe etc. This will be included as an agenda item in the next Transmission Workgroup next Thursday 01 June 2017 (“Gas Quality Information Provision”). **Closed**

JCh advised that the rate of change Wobbe index is a key factor in the stability of the burner at Peterhead CCGT power station. With advanced notice, the burner tip can be retuned so that the burner does not trip out. Consequences of a trip include commercial cash outs on gas and electricity market and frequency effects on the electricity system.

**New Action 0505:** JCh to provide wording around impact on Peterhead CCGT power station.

In connection with the previous discussion about how National Grid NTS’ ability to agree to higher gas quality limits may be limited, PH explained that National Grid NTS would wish to minimise any detrimental effects on other parties, including other sources of supply that may wish to access such flexibility. DOD queried the nature of such detrimental effects. PH presented a summary of offline discussions that had been held between National Grid NTS, BP and NSMP about limiting the duration of the proposed 5.5% limit within the NEA to when it is actually required, after which it would revert to its current level of 4%. Further discussion is needed and NSMP and National Grid NTS agreed to report back to the next meeting.

**New Action 0506:** DOD and PH to report back to the next meeting on time-limiting the proposed CO<sub>2</sub> limit increase within the NEA.

#### 4.0 Development of Workgroup Report v0.10

PH presented a slide on Application of the CO<sub>2</sub> Limit to the Workgroup with a view to including this in the WGR covering the options considered.

During an onscreen review of the draft Workgroup Report there was further discussion on the subject of whether this modification should be Self Governance or not, and that the points that are raised in the justification section 2 of the modification suggest it should perhaps be an Ofgem Decision.

In summary, the Workgroup feel that the wording is not quite right and it is open to some interpretation.

Wording for NEA needs to be decided and then this will go in to the Workgroup Report. The Workgroup agreed there should be an Appendix to hold the detail regarding the Sgt Fergus CO<sub>2</sub> blending analysis (4 scenarios).

RH agreed that once all of the updates have been received and the draft Workgroup Report has been updated, it will be published. Those requiring a Word version of the report should request via email to [enquiries@gasgovernance.co.uk](mailto:enquiries@gasgovernance.co.uk).

**New Action 0507:** Next meeting: All to send in comments regarding any disagreement with Panel’s decision to select Self Governance for this Mod.

**Action update:** Workgroup participants may find this Self Governance Guidance helpful: [http://www.gasgovernance.co.uk/sites/default/files/UNC%20-%20Self%20Governance%20Guidance%20v1.0\\_1.pdf](http://www.gasgovernance.co.uk/sites/default/files/UNC%20-%20Self%20Governance%20Guidance%20v1.0_1.pdf)

**New Action 0508:** RH to check what happens next if there is a query on the Self Governance statement.

**New Action 0509:** MK to look at the drafting of the Justification for Self-Governance.

## 5.0 Next Steps

At the next Workgroup meeting, the Workgroup will consider:

- any amendments to the modification if provided (further background to the proposed change);
- any comments on Self Governance of the mod; and
- development of the Workgroup Report.

## 6.0 Diary Planning

Workgroup meetings will take place as follows:

Time/Date	Venue	Workgroup Programme
27 June 2017	Elxon 350 Euston Road, London, NW1 3AW	

### Action Table (as at 22 May 2017)

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
0105	27/01/17	4.0	BP and National Grid NTS to consider if any adaptations can be made (from both an NEA change perspective and a change to operational procedures) to the operating arrangements between the terminals and the NTS, to manage out of specification gas resulting from an unplanned outage. <b>See Action 0302</b>	BP (MK) and National Grid NTS (PH)	<b>Closed</b>
0106	27/01/17	5.0	BP (MK) to clarify if other gas quality parameters are affected (CV, Wobbe and Dewpoint).	BP (MK)	<b>Closed</b>
0108	27/01/17	5.0	<i>National Grid NTS to consider if an assessment of its operational risks is required</i> - PH and DB to provide a statement for inclusion in the Workgroup Report (if required).	National Grid NTS (PH) and (DB)	<b>Closed</b>
0201	28/02/17	2.0	To look to further explain the rationale behind selection of the 5.5% CO <sub>2</sub> level.	BP (MK)	<b>Closed</b>
0202	28/02/17	10.0	To look to provide another 'worst case' scenario based on the Shell low flow period in June 2016 (using actual CO <sub>2</sub> data and NEA upper limits) and update the analysis to include the weighted average CO <sub>2</sub> positions and the max/min daily CO <sub>2</sub> levels.	National Grid NTS (PH)	<b>Closed</b>
0301	22/03/17	5.0	Joint Office to contact various consumers/groups for views on the impacts on them from this proposal. <b>See Action 0402; 0403 and 0404</b>	Joint Office (RH)	<b>Closed</b>

## Action Table (as at 22 May 2017)

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
0302	22/03/17	5.0	To provide a statement from Storage for the WGR for next meeting	Uniper (RF)	Closed
0303	22/03/17	5.0	Elaboration on the 'Wider Considerations' part of the Workgroup Report and what would be included in this section. To provide some text for the Workgroup Report.	Shell (AB)	Carried Forward
0304	22/03/17	6.0	To seek a more detailed understanding of how the plant operates at the right Wobbe level and the effect on the CO <sub>2</sub> level – basically this is more about operating the plant to meet the 5.5%. <b>Ref Action 0104</b>	NSMP (DOD)	Closed
0305	22/03/17	6.0	To investigate as to what would the impact be on a "super TFA" request. <b>Ref Action: 0105</b>	National Grid NTS (PH)	Closed
0306	22/03/17	6.0	MK/DOD to provide a statement to put the new scenario in to context and/or explain why it is an extreme scenario that is unlikely to occur. <b>See Action 0406</b>	BP Gas (MK) NSMP (DOD)	Closed
0307	22.03.17	6.0	To look at the low flow period (8 days in June 2016) to clarify the background to the event and how relevant it is to this analysis/development of further scenarios.	Shell (SB)	Closed
0401	25.04.17	9.0	RH to publish the Draft Workgroup Report. Workgroup members to review and suggest changes.	Joint Office (RH) All	Closed
0402	25.04.17	9.0	To review 'Impact on Customers' in the Draft Workgroup Report	Murray Kirkpatrick (MK) Phil Hobbins (PH)	Closed
0403	25.04.17	10.0	Joint Office (RH) will make contact with CIA. <b>Ref Action 0301</b>	Joint Office (RH)	Closed
0404	25.04.17	10.0	To make contact with DNs in the context of historic HSE class exemption relating to oxygen flow for bio-methane. <b>Ref Action 0301</b>	Joint Office (RH)	Closed
0405	25.04.17	10.0	To assess impact on CNG Offtake. <b>Ref Action 0301</b>	National Grid NTS (PH)	Closed
0406	25.04.17	10.0	To investigate that if there is a CO <sub>2</sub> content above 4% when the gas enters the NTS, can Shippers be alerted? <b>Ref Action 0306</b>	NSMP (DOD) National Grid NTS (PH)	Closed
0501	22/05/1	2.0	Once it is established if there are further amendments to be submitted, RH to publish the Amended Modification.	Joint Office (RH)	Pending

**Action Table (as at 22 May 2017)**

<b>Action Ref</b>	<b>Meeting Date</b>	<b>Minute Ref</b>	<b>Action</b>	<b>Owner</b>	<b>Status Update</b>
0502	22/05/1	2.0	Confirm timeline for Amended Modification.	Joint Office (RH)	<b>Pending</b>
0503	22/05/1	3.0	DOD to provide some summary sentences from NSMP to SB suggestion	NSMP (DOD)	<b>Pending</b>
0504	22/05/1	3.0	Change Mod proposal to incorporate changes discussed.	BP Gas (MK)	<b>Pending</b>
0505	22/05/1	4.0	To provide wording for Workgroup Report around impact on customers	SSE (JCh)	<b>Pending</b>
0506	22/05/17	4.0	To report back to the next meeting on time-limiting the proposed CO <sub>2</sub> limit increase within the NEA.	NSMP (DOD) National Grid NTS (PH)	<b>Pending</b>
0507	22/05/17	4.0	All to send in comments regarding the change from Self Governance to Ofgem Decision.	All	<b>Pending</b>
0508	22/05/17	4.0	RH to check what happens next if there is a query on the Self Governance statement	Joint Office (RH)	<b>Pending</b>
0509	22/05/17	4.0	To look at the drafting of the Justification for Self-Governance	BP Gas (MK)	<b>Pending</b>