

**UNC Workgroup 0581S Minutes
Amending the Oxygen content limit specified in the Network
Entry Agreements at Grain LNG**

Thursday 07 July 2016

Elxon, 350 Euston Road, London NW1 3AW

Attendees

| | | |
|----------------------------|-------|---------------------------------|
| Amrik Bal | (AB) | Shell |
| Andrew Blair | (AB) | UK |
| Andrew Malley | (AM) | Ofgem |
| Andrew Pearce | (AP) | BP Gas |
| Angharad Williams* | (AW) | National Grid NTS |
| Anna Shrigley | (AS) | Eni |
| Charles Ruffell | (CR) | RWE |
| Colin Hamilton | (CH) | National Grid NTS |
| Colin Thomson | (CT) | Scotia Gas Networks |
| Craig Dean | (CD) | National Grid LNG |
| David Eastlake | (DE) | CVSL |
| Gerry Hoggan | (GH) | ScottishPower Energy Management |
| Graham Dickson | (GD) | Interconnector UK |
| Graham Jack | (GJ) | Centrica |
| Jeff Chandler* | (JCh) | SSE |
| Jennifer Randall | (JR) | National Grid NTS |
| John Costa | (JCa) | EDF Energy |
| Julie Cox | (JCx) | Energy UK |
| Karen Visgarda (Secretary) | (KV) | Joint Office |
| Les Jenkins (Chair) | (LJ) | Joint Office |
| Lucy Manning | (LM) | Gazprom |
| Mark Johnson | (MJ) | National Grid LNG |
| Marshall Hall | (MHI) | Oil & Gas UK |
| Matt Hatch | (MH) | National Grid NTS |
| Nick Wye | (NW) | Waters Wye Associates |
| Phillip Hobbins | (PH) | National Grid NTS |
| Richard Fairholme | (RF) | Uniper |
| Sarah Chleboun* | (SC) | National Grid NTS |
| Sean Hayward | (SH) | Ofgem |
| Sean McGoldrick* | (SMc) | National Grid NTS |
| Sinead Obeng* | (SO) | South Hook Gas |
| Steve Pownall | (SP) | Xoserve |
| Steven Britton* | (SB) | Cornwall Energy |
| Terry Burke | (TB) | Statoil |

*via teleconference

Copies of all papers are available at: <http://www.gasgovernance.co.uk/0581/070716>

The Workgroup Report is due to be presented at the UNC Modification Panel on 15 September 2016.

1.0 Introduction

LJ reminded the Workgroup that this Modification had originally been sent straight to consultation by Panel. He explained that issues had been raised during the consultation process that had needed further assessment by the Workgroup

2.0 Review of Minutes (02 June 2016)

The minutes of the previous meeting were approved.

3.0 Further consideration of the agreed list of issues

LJ confirmed that these were the only issues that were in scope for the Workgroup to discuss in the meeting.

3.1 Network Penetration from Grain

The Workgroup reviewed the analysis presented by National Grid Grain LNG (Grain) and the affected Transporters, National Grid NTS (NTS) and Scotia Gas Networks (SGN).

National Grid NTS

In relation to Actions 0601 and 0602; PH provided a brief overview of the 'Modification 0581S – Amending the Oxygen Content Unit Specified in the NEAs at Grain LNG' presentation. He explained the background and the analysis undertaken, focusing on the areas of high and low demand and the directional flow of the gas. A short general discussion took place and it was unanimously agreed that the impact on the NTS and connected sites was not expected to be material.

National Grid Grain LNG

MJ presented the Grain analysis as detailed in the paper 'Penetration of Higher Oxygen Gas from Grain into the NTS or Zone of influence' and he overviewed the Network schematic of the Isle of Grain Connection to the NTS, including the directional flow of gas. AB asked if 60ppm was needed for the NTS Network Entry Agreements (NEAs) and not 200? MJ explained that National Grid LNG did not want to have to go through this process again in the near future, and the tolerances were lower than the contractual limit. LJ reminded participants that the modification was as stated, and the Solution was not for debate.

Scotia Gas Network

Regarding Actions 0601 and 0602; CT presented the Scotia Gas Networks analysis via a schematic diagram of the South East LDZ, which provided a representation of the Local Transmission System (LTS) and Intermediate Pressure (IP) networks operated by SGN. He said Scotia Gas Networks also did not see there would be any material impact and described the directional flow of gas as detailed in the document.

3.2 Ballasting

MJ referred to a published submission from Grain, explaining that any assumption of a move to air ballasting was incorrect; there were no plans to do this.

3.3 Remaining Issues

The Workgroup reviewed and discussed the analysis that had been presented and agreed there would be a very low likelihood of a material impact to storage systems as a result of the proposed increase in oxygen level at Grain. On this basis, it was felt that there would be no value in assessing the remaining issues.

4.0 Development of Workgroup Report

LJ overviewed the Workgroup Supplemental Report section (inc. Appendices) in the Final Modification report, with participants agreeing this was a fair representation of their views.

5.0 Review of Actions Outstanding

0601: Isle of Grain Entry Point - National Grid LNG (MJ and CD) to produce analysis of the likelihood/frequency of actual deliveries reaching 200ppm, and provide views regarding the perceived impacts (positive and negative) on the wider surrounds for inclusion in the report.

Update: Analysis produced; see discussions at 3.1 above. **Closed**

0602: Transporters (National Grid NTS and Scotia Gas Networks) to carry out assessments to establish the farthest points where gas with increased oxygen levels (low, medium and high flows) might reach, i.e. a 'heat map' to show how this propagates through the networks.

Update: Analysis produced; see discussions at 3.1 above. **Closed**

0603: All parties to consider the key issues arising from the consultation and provide views/further comments to the Joint Office (as soon as possible) for inclusion in the draft Workgroup Report.

Update: It was agreed this information had been presented in relation to Actions 0601/0602 as above in section 3.1, so this action could now be closed. **Closed**

6.0 Next Steps

LJ summarised that the Final Modification Report would be returned to the July Panel for consideration.

As the requested assessment had been completed, the Workgroup was closed.

Action Table (07 July 2016)

| Action Ref | Meeting Date | Minute Ref | Action | Owner | Status Update |
|------------|--------------|------------|---|---|---------------|
| 0601 | 02/06/16 | 2.1 | <i>Isle of Grain Entry Point</i> - MJ and CD to produce analysis of the likelihood/frequency of actual deliveries reaching 200ppm, and provide views regarding the perceived impacts (positive and negative) on the wider surrounds for inclusion in the report. | National Grid LNG (MJ/CD) | Closed |
| 0602 | 02/06/16 | 2.1 | Transporters (National Grid NTS and Scotia Gas Networks) to carry out assessments to establish the farthest points where gas with increased oxygen levels (low, medium and high flows) might reach, i.e. a 'heat map' to show how this propagates through the networks. | National Grid NTS (PH) and Scotia gas Networks (HC) | Closed |
| 0603 | 02/06/16 | 3.0 | All parties to consider the key issues arising from the consultation and provide views/further comments to the Joint Office (as soon as possible) for inclusion in the draft Workgroup Report. | ALL Parties | Closed |