

UNC Workgroup 0645S Minutes **Amending the oxygen content limit in the Network Entry Agreement at South Hook LNG**

10.00 Thursday 01 March 2018
via teleconference

Attendees		
Rebecca Hailes (Chair)	(RH)	Joint Office
Helen Bennett (Secretary)	(HB)	Joint Office
Charles Ruffell*	(CR)	npower
Elvan Akkaya*	(EA)	South Hook Gas
Graham Jack*	(GJ)	Centrica
Jeff Chandler*	(JCh)	SSE
Julie Cox*	(JCx)	Energy UK
Malcolm Montgomery*	(MM)	National Grid NTS
Mark Rixon*	(MR)	ENGIE
Murugan Babumohanana*	(MB)	National Grid NTS
Nick King	(NK)	CNG Services Ltd
Nick Wye*	(NW)	Waters Wye
Nicola Lond*	(NL)	National Grid NTS
Robin Dunne*	(RD)	Ofgem
Rowan Hazell*	(RH)	Cornwall Insight
Sinead Obeng*	(SO)	South Hook Gas
Steve Pownall*	(SP)	Xoserve
Shiv Singh*	(SS)	Cadent
<i>*via teleconference</i>		

Apologies

Phil Hobbins National Grid NTS

Copies of all papers are available at: <https://www.gasgovernance.co.uk/0645>

The Workgroup Report is due to be presented at the UNC Modification Panel by 15 March 2018.

1.0 Introduction and Status Review

1.1 Approval of Minutes (01 February 2018)

The minutes from the previous meeting were approved.

2.0 Heat Map Analysis (Action 0201)

MB joined the teleconference and talked the Workgroup through the Heat Map Analysis provided by National Grid NTS (published here:

<https://www.gasgovernance.co.uk/0645/010318>). The analysis will provide further understanding to the Workgroup as to whether South Hook gas might reach the North West and North East of England.

When asked MB provided clarification on where Dragon, South Hook and Milford Haven are situated on the NTS.

Talking through the Analysis, Assumptions and Approach for the creation of this analysis, MB explained how the analysis looked at Milford Haven flows for both summer and winter periods based on the 2017 Future Energy Scenarios (FES) for a selection of years from 2018 to 2039, adding that, it is assumed throughout the analysis that South Hook flows have an oxygen content of 200ppm.

Moving on to slide 4 MB explained the Milford Haven forecast flows for winter conditions and provided analysis showing 2017 peak conditions of demand and supply to 2039. The analysis shows the ranges from 60 mcm/d to 80 mcm/d.

MB explained FES scenario abbreviations are:

SP Slow Progression

SS Steady State

CP Consumer Power

TD Two Degrees

The lines on the graph represent the high case and low case for each FES scenario assumptions coming in to the NTS.

The Heat Map, on slide 5, shows that, in a worst-case scenario, 25% of Milford Haven gas could go to the North-West area.

JCx asked if lower demands are looked at, could the scenario of lower demand but still peak supply be looked at.

SO mentioned that the peak flow assumptions of 60-80 mscmd is above South Hook technical capacity limit, MB clarified that the 20% of peak flow quoted relates to Dragon doing 20% of the overall 80%.

SO maintained this would still exceed the technical capacity limit for South Hook which is 650 GWh/d. SO and MB confirmed that this equated to around 60 mcm/d using a conversion of 10.83. On this basis, the maximum supply level of 80 mcm/d appears to be technical unachievable if Dragon was around 14 mcm/d.

The Workgroup noted that the analysis may need to be re-run.

MB went on to provide similar analysis that covered South Hook forecast flows for summer conditions beginning on slide 7.

Slides 8, 9 and 10 show Heat Maps of the NTS during summer conditions with

- minimum,
- average, and
- maximum range of Milford Haven gas supply.

MB explained the difference between the slides, highlighting that for the maximum range, the heat map shows that a reasonably significant amount of gas could travel north west.

MB said that comingling is less and less compression, this is why there is no yellow highlighted on the maximum range heat map and that smaller offtakes take more gas in the winter which is the reason why more than 25% of gas reaches further limits and that there is less opportunity of comingling in summer than there is in winter.

When the Workgroup looked at the Historical Milford Haven flows in the past decade (2008-2018), SO advised that the 2011 peak was probably when South Hook Gas was operating at their technical maximum, setting up and with lots of cargoes coming in to the UK, suggesting that they could have that peak again if the UK suffers more winters such as the one we are experiencing now.

MB ended the presentation with the summary on slide 13.

RH thanked MB for going through the analysis and for stepping in at short notice. She drew the Workgroup's attention to an update received from Storengy UK Ltd on 28 February 2018, which advised:

With regards to the oxygen levels at South Hook (Mod 0645S), we do not believe that this proposal is likely to have a material effect on oxygen levels in gas at the Stublach (Cheshire) site.

RH advised the Workgroup that this will go in to the Workgroup Report with the permission of A. Neild (Storengy UK Ltd).

NW said that the impact, even in the worst-case scenario is very low.

The workgroup agreed that even if the analysis were re-run the results are likely to show an even lower result and therefore concluded that this was not necessary.

3.0 Development of Workgroup Report

RH showed onscreen the organisations that have been written to (GSOG, MEUC, EIUC and CIA), these are referred to in the Workgroup Report and said that the Operators in the North West have had the opportunity to comment.

As a backstop, any parties wishing to comment would have the opportunity at consultation stage.

An onscreen update to the Workgroup Report was completed which included amendments to the Impacts & Other Considerations and Relevant Objectives sections.

The Workgroup did mention that the penetration of oxygen could be more diluted if the analysis shown from National Grid was updated with correct numbers.

SO mentioned that whereas she is happy with the analysis provided, she does acknowledge that some of the analysis shows higher technical capacity than South Hook have.

Based on the update email info from Storengy and noting that there has been no further response from any other storage operator, the workgroup concluded no costs or benefits passing through to storage operators in the North West.

4.0 Review of Outstanding Actions

Action 0201: NG (in line with previous enabling modification to facilitate oxygen content amendment) to produce a view of the penetration of South Hook Gas into the NTS, providing scenarios and a heat map diagram.

Update: Analysis has been provided. MB went through the analysis completed which included heat maps. **Closed**

Action 0203: PH to provide wording for the Workgroup Report specifically TSO actions relating to gas quality specification and cross border flow.

Update: This has been provided and the Workgroup Report has been updated. **Closed**

5.0 Next Steps

RH suggested the Workgroup Report is finalised and sent out to the Workgroup which will be followed up with a short teleconference to approve it on **Wednesday 7th March at 9:30.**

6.0 Any Other Business

None

7.0 Diary Planning

A short teleconference to approve the Workgroup Report on Wednesday 7th March at 9:30.

Thereafter, submit the Workgroup Report to March UNC Panel.

Action Table (as at 01 March 2018)

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
0201	01/02/18	2.0	NG (in line with previous enabling modification to facilitate oxygen content amendment) to produce a view of the penetration of South Hook Gas into the NTS, providing scenarios and a heat map diagram.	National Grid NTS (PH)	Closed
0203	01/02/18	2.0	PH to provide wording for the Workgroup Report specifically TSO actions relating to gas quality specification and cross border flow.	National Grid NTS (PH)	Closed