UNC Workgroup 0870 Minutes
Amendments to Wobbe Index and Calorific Value Lower Limits at NTS System Entry Points

Thursday 04 April 2024

via Microsoft Teams

Attendees		
Eric Fowler (Chair)	(EF)	Joint Office
Niamh Holden (Secretary)	(NH)	Joint Office
Aidan Lo	(AL)	Joint Office
Adam Bates	(AB)	SEFE Marketing & Trading
Adam Lane	(AL)	Spirit Energy
Alex Nield	(AN)	Storenergy
Amy Howarth	(AH)	Storenergy
Anna Shrigley	(AS)	ENI
Bethan Winters	(BW)	Wales & West Utilities
Bernard Kgomotso	(BK)	Spirit Energy
Carlos Agguire	(CA)	Pavilion
Chris Wright	(CWr)	Exxon Mobil
Claire Scarfe	(CS)	Cadent
Conor McClarin	(CM)	National Gas Transmission (NGT)
Hannah Reddy	(HR)	Corella on behalf of Xoserve
Gavin Williams	(GW)	National Gas
James Lomax	(JL)	Cornwall Insight
Joseph Leggott	(JLe)	Interconnector
Julie Cox	(JC)	Energy UK
Louise Hellyer	(LH)	Total Energies Gas & Power
Lauren Jauss	(LJ)	RWE
Malcolm Mackenny	(MM)	National Grid Grain LNG
Mariachiara Zennaro	(MZ)	Centrica
Marion Joste	(MJ)	ENI
Matthew Brown	(MB)	Ofgem
Mathew Chandy	(MC)	Ofgem
Michael Crowley	(MCr)	Gas Networks Ireland
Ofordi Nabokei	(ON)	National Gas Transmission
Phil Hobbins	(PH)	National Gas Transmission
Phil Lucas	(PH)	National Gas Transmission
Richard Fairholme	(RF)	Uniper
Ritchard Hewitt	(RH)	Hewitt Home and Energy Solutions
Samantha Wilson	(SW)	Spirit Energy
Tim Gwinnell	(TG)	South Hook Gas
The Workgroup Report is due to be presented at the UNC Modification Panel by 19 September 2024.		

This Workgroup meeting will be considered quorate provided at least two Transporter and two Shipper User representatives are present.

Please note these minutes do not replicate/include detailed content provided within the presentation slides, therefore it is recommended that the published presentation material is reviewed in conjunction with these minutes. Copies of all papers are available at: https://www.gasgovernance.co.uk/0870/040424

1.0 Outline of Modification

Ofordi Nabokei (ON) introduced the modification and explained this Modification is needed to enable implementation of a recent change in legislation pertaining to the lower limit for Wobbe Index for which a regulatory impact assessment has already been completed. The Gas Safety (Management) (Amendment) Regulations 2023 entered into force on 6th April 2023 which reduced the lower limit for Wobbe Index that UK gas transporters are permitted to convey on their networks from 47.2 MJ/m3 to 46.5 MJ/m3 with effect from April 2025.

Consequently, some Delivery Facility Operators wish to amend their Network Entry Provisions in their connection agreement with NGT. The UNC requires NGT to consult with Users prior to any such contractual amendments being executed, hence NGT has raised this 'enabling' Modification.

NGT proposed 3 implementation options, noting that the preference was to propose a Group Modification, so that those who had expressed an interest in a reduction could be included.

ON explained that the intention of the proposal is to enable to implementation of the new Wobbe limit as well as the Calorific Value at some NTS System Entry Points.

ON provided a table of those who had requested a lower limit and the limit they had requested, noting that it would be helpful to hear from those who have requested a reduction and why.

Malcolm Mackenny (MM) explained that Grain LNG have high Wobbe cargos which are then blended with Nitrogen. Sometimes the plant has an upset condition for example if the vapourisers trip off where the output gas quality can blip down. MM noted that this was rare, and they had no intention of routinely operating at the lower Wobbe limit due to costs, but it would help avoid the upset conditions. MM added that they have requested a lower CV limit to accompany the low Wobbe limit.

Jeff Chandler (JC) questioned whether they had any metrics which point to the frequency of the upset events. MM clarified that it was a rare event and indicated it would happen maybe once a year.

Bernard Kgomotso (BK) provided the Workgroup with the reasoning for why Spirit Energy require a lower Wobbe limit. BK explained that they have 4 different gas fields which have different flow rates and when their Nitrogen Rejection Unit is working optimally, the current Wobbe Spec is always achieved. BK noted that the issue occurs when there are issues with their Nitrogen rejection unit.

BK took the Workgroup through the benefits of the implementation of a lower Wobbe limit, noting that it would provide more flexibility and the ability to continue exporting has when experiencing issues with the equipment on the plant. BK added that the only time they would use the lower limit would be when restarting the Nitrogen removal plant and when any issues occur.

BK explained that they are looking to implement a plant recycle stream which would allow them to have less Wobbe excursions in the future, however at this current stage they are still at risk of tripping below the Wobbe specification, this causes delays of up to 24 hours before they are able to flow into the NTS. BK added that they would not flow at the lower Wobbe for an extended period of time.

Julie Cox (JC) questioned whether they only need to run the Nitrogen Rejection Unit for certain fields, asking whether the Unit could be run less to save costs. BK confirmed that they would

not attempt to reduce costs by running it less and they would not want to bypass the flow which runs through the unit itself.

JC noted that it would be helpful to be provided with some data to show the variability of the results produced over time.

BK explained that they currently do not have an internal recycle on their plant, so when a TFA is received, they have two choices which is to blend the sale gas with incoming gas that has been processed or the gas is vented. BK confirmed that there are optimisation projects which are being implemented to further improve the flexibility of the plant.

JC noted her concern regarding excursions causing powerplants close to Entry Points to trip.

Adam Lane (AL) stated that even if they were flowing at 46.5 on a low flow on a high flow day it wouldn't have that much impact on the system. ON added that this was confirmed within the Impact Assessment completed by HSE.

ON provided reasoning on behalf of Neptune Energy. ON explained that they receive gas from a number of North Sea fields, some which are reliant on blending with higher Wobbe fields to enable flow to NGT. A reduction in the lower limit is believed to reduce those fields dependence on blending and thus improve flexibility and availability.

ON took the Workgroup through GSMAR Implementation in respect of Interconnectors, noting that by not reducing the lower limit it could act as barrier for cross-border flow and avoids risk of stranded gas in their pipelines. NGT carried out some risk analysis to calculate the potential co-mingled Wobbe index, which shows that lowest combined Wobbe remains above the current lower limit of 47.2 MJ/m3.

ON added that they were currently working on harmonising the lower Wobbe limit between TSOs in Interconnection Agreements.

The Workgroup discussed the Gas Quality Data Transparency. ON advised that one of the potential benefits of enhanced gas quality data transparency as it reduces concerns with GSMAR changes, noting that NGT have previously sought to address the issue and explored the potential for gas quality data publication.

NGT proposed the following solutions for Gas Quality Data Transparency:

1. 'Backward Looking' View - Publish CV and Wobbe data measured at GDN offtake points

2. 'Forward Looking' View - Produce [annual] 'heat maps' of where low Wobbe gas might feature.

JC argued that there are various other options to be considered, although accepted that some of those options might be quite difficult to achieve. JC explained backwards looking data is not a good indication of the future and that the heat maps are somewhat useful but do not access the main concern, which JC believed to be the short-term and unpredictable excursions.

JC suggested that it might be useful to consider wider gas quality, noting that this raises the need for more transparency on gas quality in the context of future hydrogen blending.

ON noted that this Modification is only concerned with implementing the new limit to those who have requested it. NGT appreciate that things change, and in respect of hydrogen blending they expect the HSE to look at this again and for there to be another review in relation to the Wobbe limit.

JC noted that transparency of Gas Quality Data has been an area of concern for a long time but agreed the Modification itself is limited to the new Wobbe limit implementation.

Michael Crowley (MCr) questioned whether advanced warning could be provided to recipients if the Wobbe was expected to drop below 47.2. ON advised that this could be looked into.

PH suggested a list is created of the options to provide more transparency and then this could be reviewed; cheaper and quicker options could be implemented first and then the focus could be shifted to those which are slightly more difficult and costly to implement. PH pointed out that these options must be proportional to the scale of the problem.

MCr asked whether the intention to discuss the details within the 0870 workgroup or do it offline in parallel with the Modification. ON advised that it would be helpful to discuss it within this Modification Workgroup and advised Participants to contact her directly.

New Action 0401: NGT (PH/ON) to discuss and make an initial assessment on options to implement more transparency of Gas quantity information, to be discussed within the next Workgroup.

Ritchard Hewitt (RH) questioned how they would access the more cost-effective option unless they know what the quantified financial risk is that each option would mitigate. ON advised that they could use the risk assessment that was published within the GS(M)R review.

JC suggested it would be useful to have a commentary from all the DFOs who would like the Wobbe limit reduced for completeness and to provide context within the Workgroup Report. ON noted that a brief rationale for each site's request for a lower Wobbe limit is included within the Modification

The Workgroup discussed further the need for a detailed review of Gas Quantity information which can be published to provide more transparency, highlighting that further discussions are needed with Ofgem and the need to look at sensitive sites.

RH asked whether there were any Mifid or Remit implications created by this Modification, as it could change the way they interact with the Gas Market. NGT agreed to review this.

ON shared a high-level plan with the Workgroup on GSMAR Implementation, including process steps for the UNC Modification, Site Implementation, and Interconnectors.

Please refer to the published slides for further information.

2.0 Initial Discussion

2.1. Issues and Questions from Panel

Question 1: Consider impacts on Hydrogen Blending.

Adam Lane questioned whether hydrogen blending was relevant, asking why hydrogen would be looked at like that and not look at the other terminals at the same time. JC believed that it wasn't a terminal issue but rather publishing data at GDN points.

PH advised the CV and Wobbe is lower in hydrogen, so if a lower Wobbe limit is implemented it will still be of use in when hydrogen blending is implemented.

The Workgroup discussed the cost benefit of including the hydrogen value at this stage or at a later date.

Please refer to 1.0 and the published slides for further information.

Question 2: Consider the impact on gas-intensive industries of the increase in volatility of the calorific value

Please refer to 1.0 and the published slides for further information.

Question 3: Review cost impacts on CCGTs and end consumers (gas and electricity).

Please refer to 1.0 and the published slides for further information.

Question 4: Consider impacts on Exit Agreement.

PH advised that there was no impact on Network Exit Agreements as they do not have a gas quality specification.

Question 5: Should this modification obligate data provision on gas quality.

PH advised that this Modification should not currently obligate data provision on gas quality. JC disagreed and noted that alternates may be raised in relation to this Modification.

PH believed that this Modification should not be held up pending the delivery of a particular solution on transparency.

Please refer to 1.0 and the published slides.

2.2. Initial Representations

None received.

2.3. Terms of Reference

As matters have been referred from Panel a specific Terms of Reference will be published alongside the Modification at www.gasgovernance.co.uk/0870

3.0 Next Steps

None.

4.0 Any Other Business

None.

5.0 Diary Planning

0870 Workgroup meetings are listed at: https://www.gasgovernance.co.uk/0870

All other Joint Office events are available via: www.gasgovernance.co.uk/events-calendar/month

Time / Date	Paper Publication Deadline	Venue	Workgroup Programme
10:00 Thursday 02 May 2024	5 pm Wednesday 24 April 2024	Solihull/ Microsoft Teams	TBC
10:00 Thursday 06 June 2024	5 pm Wednesday 29 May 2024	Solihull/ Microsoft Teams	TBC
10:00 Thursday 04 July 2024	5 pm Wednesday 26 June 2024	Solihull/ Microsoft Teams	TBC
10:00 Thursday 01 August 2024	5 pm Wednesday 24 July 2024	Solihull/ Microsoft Teams	TBC
10:00 Thursday 05 September 2024	5 pm Wednesday 28 August 2024	Solihull/ Microsoft Teams	TBC

0870 Workgroup Action Table						
Action Ref	**Meeting Date**	**Minute Ref**	**Action**	**Reporting Month**	**Owner**	**Status Update**
0401	04/04/24	1.0	NGT (PH/ON) to discuss and make an initial assessment on options to implement more transparency of Gas quantity information, to be discussed within the next Workgroup.	May 2024	National Gas (PH)	**Pending**