At what stage is **UNC Final Modification Report** this document in the process? UNC 0826S: 01 Modification 02 Workgroup Report Amendment to Network Entry **Draft Modification** 03 Report Provision at Shell St Fergus 04 **Terminal Purpose of Modification:** This Modification will enable the current Wobbe Index upper limit that applies between National Grid and Shell at St Fergus to be temporarily increased from 51.2 MJ/m³ to 51.4 MJ/m^3 . **Next Steps:** The Panel determined that this Self-Governance Modification should be implemented.

Impacted Codes:

Impacted Parties:

None

High:

None:

Version 2.0

15 December 2022

Low: GB gas transporters, interconnector operators, shippers, consumers

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1 Summary

What

This is an enabling Modification to facilitate a temporary amendment to the Wobbe Index (WI) upper limit within the Network Entry Provisions between Shell and National Grid at St Fergus. It is proposed to increase the limit from 51.2 MJ/m3 to 51.4 MJ/m3. The amendment is requested for a 12 month period to enable St Fergus to prove continued operation within this limit and should this be successful a subsequent permanent change may be requested within this 12 month window. This requested time period would allow for a permanent change request to be approved within this time so that Shell St Fergus operations would not have to revert back to the 51.2 MJ/m3 spec while waiting on the permanent change to be approved.

Why

Shell St Fergus currently operates under a legacy entry agreement which has an upper Wobbe Index limit of 51.2 MJ/m3. Due to the current energy climate, Shell St Fergus would like increased flexibility on the Wobbe Index limit to enable increased energy deliveries to National Grid thereby helping with security of supply concerns currently being faced. The requested increase is the same as the standard network agreement limit and within the existing GS(M)R range therefore is not believed to be a significant change and impact on others within the system.

Should the change not be made then Shell St Fergus will continue to operate within its current Wobbe Index limit which in turn will limit the ability to optimise energy delivered to National Grid.

How

The Proposer is seeking to amend the Network Entry Provision described above via this enabling Modification. The proposed limit of 51.4 MJ/m3 is consistent with other network entry agreements and in line with the GS(M)R legislation ≤51.41 MJ/m3, therefore gas accepted into the National Grid terminal would still be within this limit.

2 Governance

Justification for Self-Governance

The effect of this amended Modification on competition is not deemed material due to other network entry parties already operating to the requested increased Wobbe Index limit.

No other pipeline incomers entering the NTS at St Fergus have gas sources above the existing GS(M)R Wobbe Index upper limit, therefore this amendment will not unduly discriminate.

No further development is required so the proposer is seeking implementation as soon as possible after this UNC proposal has been accepted in order to increase energy deliveries without delay.

The modification:

- (i) is unlikely to have a material effect on:
 - (aa) existing or future gas consumers; and
 - (bb) competition in the shipping, transportation or supply of gas conveyed through pipes or any commercial activities connected with the shipping, transportation or supply of gas conveyed through pipes; and
 - (cc) the operation of one or more pipe-line system(s); and

- (dd) matters relating to sustainable development, safety or security of supply, or the management of market or network emergencies; and
- (ee) the uniform network code governance procedures or the network code modification procedures;
- (ii) is unlikely to discriminate between different classes of parties to the uniform network code/relevant gas transporters, gas shippers or DN operators.

Requested Next Steps

This Modification should:

- be considered a non-material change and subject to Self-Governance.
- be assessed by a Workgroup.

3 Why Change?

The Shell St Fergus terminal provides approximately 12% of the UK's gas supplies and exports gas to National Grid within a Wobbe Index upper limit of 51.2MJ/m3 where it comingles with other entrants to National Grid who already operate within the requested Wobbe Index limit of 51.4 MJ/m3. The Proposer requests this increase on a 12 month temporary basis with a view to a subsequent permanent change request should expected operational results be proven. Given the current climate and security of supply concerns, the Proposer is keen to play its part in society and help optimise deliveries to National Grid. This could aid diversity of supply thereby benefitting security of supply. Should the change not be made then Shell St Fergus will continue to optimise deliveries within its current spec but would result in the additional gains not being realised.

4 Code Specific Matters

Reference Documents

Link to: Gas Safety (Management) Regulations 1996 (legislation.gov.uk)

Knowledge/Skills

No additional knowledge/skills, above those available, required to assess this Modification.

5 Solution

This Modification seeks to amend the Network Entry Provision between Shell and National Grid at St Fergus for a specified time period of 12 months starting as soon as possible after this UNC proposal has been accepted. It is proposed to increase the Wobbe Index upper limit from 51.2 MJ/m3 to 51.4 MJ/m3 for this period subject to the conditions set out below.

With this Modification, export from Shell St Fergus to National Grid will still have a Wobbe Index no higher than other entrants who already operate within 51.4 MJ/m3. Should Shell St Fergus exceed 51.4 MJ/m3, then this will be reduced back below 51.4 MJ/m3 in accordance with the Transportation Flow Advice process.

6 Impacts & Other Considerations

Does this Modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?

None.

Workgroup Participants did not disagree.

Consumer Impacts

A benefit to consumers through security of supply could result by enabling increased energy deliveries to National Grid thereby aiding diversity of supply. These increased deliveries could assist consumers through downward pressure on gas prices.

What is the current consumer experience and what would the new consumer experience be?

This Modification seeks to help increase energy delivered to National Grid. The knock-on effect to consumers could be to mitigate against price rises due to increased diversity of supply.

Workgroup Participants did not disagree that there may be positive benefits as stated.

Impact of the change on Consumer Benefit Areas:		
Area	Identified impact	
Improved safety and reliability None	None	
Lower bills than would otherwise be the case This change is unlikely to reduce bills however it could help mitigate against further price rises by optimising gas deliveries to National Grid.	Positive	
Reduced environmental damage None	None	
Improved quality of service None	None	
Benefits for society as a whole This Modification can help with security of supply by optimising current energy supplies to National Grid.	Positive	

Cross-Code Impacts

No impact identified.

EU Code Impacts

No impact identified.

Central Systems Impacts

No impact identified.

Workgroup Participants did not disagree.

7 Relevant Objectives

Im	Impact of the Modification on the Transporters' Relevant Objectives:			
Re	levant Objective	Identified impact		
a)	Efficient and economic operation of the pipe-line system.	Positive		
b)	Coordinated, efficient and economic operation of	None		
	(i) the combined pipe-line system, and/ or			
	(ii) the pipe-line system of one or more other relevant gas transporters.			
c)	Efficient discharge of the licensee's obligations.	None		
d)	Securing of effective competition:	Positive		
	(i) between relevant shippers;			
	(ii) between relevant suppliers; and/or			
	(iii) between DN operators (who have entered into transportation arrangements with other relevant gas transporters) and relevant shippers.			
e)	Provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards are satisfied as respects the availability of gas to their domestic customers.	None		
f)	Promotion of efficiency in the implementation and administration of the Code.	None		
g)	Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.	None		

The implementation of this proposal would better facilitate the following Relevant Objectives:

- a) The efficient and economic operation of the pipeline system is positively impacted by this Modification because it would facilitate increased energy to be processed through the existing network infrastructure than would otherwise be the case.
- d) Securing of effective competition between relevant shippers would be better facilitated as all would be operating in line with the GS(M)R legislation ≤51.41 MJ/m3 thereby creating a level playing field.

Workgroup Assessment

All Workgroup Participants agreed with the statements made in relation to the Relevant Objectives.

Issues and Questions from Panel

- 1. Workgroup to consider the impact on downstream users and evidence of consumer impact.
- 2. National Grid to provide evidence or a statement on why National Grid would not need to model the effect of change e.g. because it is too small to model.

National Grid NTS provided analysis as follows setting out a response to the Panel questions;

This proposal seeks to increase the Wobbe Index limit at the St Fergus Shell terminal from 51.2 MJ/m³ to 51.4 MJ/m³ on a temporary basis

National Grid NTS understands that this change would:

- Enable Shell to access the GS(M)R upper limit, consistent with other NTS entry points on a temporary basis (a further modification would be required to make the change permanent)
- Enable Shell to deliver a relatively small additional quantity of gas ~0.1 mcmd to the NTS; aggregate St Fergus flows are typically ~50-60 mcmd
- Such additional gas would comingle with other supplies from NSMP and SAGE terminals prior to NTS entry

In our view this is a low impact change to equalise the Wobbe spec for Shell with other terminals. We therefore do not believe there would be value in lengthening the timeframe for this Modification's passage through the governance process by completing network penetration analysis in this case.

Workgroup Participants did not raise any concerns or disagree with the conclusion that the impact of making the change is insignificant.

8 Implementation

As Self-Governance procedures are proposed, implementation could be within sixteen business days after a Modification Panel decision to implement, subject to no Appeal being raised.

The Proposer is seeking implementation as soon as possible after this UNC proposal has been accepted, in order to increase energy deliveries without delay.

9 Legal Text

Text

No change to the text of the UNC is required since this is an enabling Modification in accordance with UNC Transportation Principal Document Section I 2.2.3 (a).

10 Consultation

Panel invited representations from interested parties on 17 November 2022. All representations are encompassed within the Appended Representations section.

The following table provides a high-level summary of the representations.

Implementation was unanimously supported in the 3 representations received.

Representations were received from the following parties:

Organisation	Response	Relevant Objectives
Esso Exploration and Production UK Ltd	Support	a) positive d) positive
National Grid	Support	a) positive d) positive
Shell Energy Europe Limited (SEEL)	Support	a) positive d) positive

Please note that late submitted representations will not be included or referred to in this Final Modification Report. However, all representations received in response to this consultation (including late submissions) are published in full alongside this Report and will be taken into account when the UNC Modification Panel makes its assessment and recommendation.

11 Panel Discussions

Discussion

The Panel Chair summarised that Modification 0826S would enable the current Wobbe Index upper limit that applies between National Grid and Shell at St Fergus to be temporarily increased from 51.2 MJ/m³ to 51.4 MJ/m³.

Panel Members considered the representations made noting that implementation was unanimously supported in the 3 representations received.

Panel Members agreed that this enabling Modification will facilitate a temporary amendment to the Wobbe Index (WI) upper limit within the Network Entry Provisions between Shell and National Grid at St Fergus for a 12 month period to enable St Fergus to prove continued operation within this limit. Should this be successful, a subsequent permanent change may be requested.

Consideration of the Relevant Objectives

Panel Members considered Relevant Objective *a) Efficient and economic operation of the pipe-line system.*, agreeing that implementation would have a positive impact because it would facilitate increased energy to be processed through the existing network infrastructure than would otherwise be the case.

Panel Members considered Relevant Objective *d) Securing of effective competition between Shippers and/or Suppliers*, agreeing that implementation would have a positive impact because it will facilitate a level playing field as all would be operating in line with the GS(M)R legislation ≤51.41 MJ/m³.

Determinations

Panel Members voted unanimously that no new issues were identified as part of consultation.

Panel Members voted unanimously that there were no cross code impacts.

Panel Members voted unanimously to implement Modification 0826S.

12 Recommendations

Panel Determination

Panel Members agreed that Modification 0826S should be implemented.

13 Appended Representations

Representation - Esso Exploration and Production UK Ltd

Representation - National Grid

Representation - Shell Energy Europe Limited (SEEL)

Representation - Draft Modification Report UNC 0826S Amendment to Network Entry Provision at Shell St Fergus Terminal

Responses invited by: 5pm on 08 December 2022

To: enquiries@gasgovernance.co.uk

Please note submission of your representation confirms your consent for publication/circulation.

Representative:	Chris Wright
Organisation:	Esso Exploration and Production UK Limited (EEPUK)
Date of Representation:	8 December 2022
Support or oppose implementation?	Support
Relevant Objective:	a) Positived) Positive
Relevant Charging Methodology Objective:	Not Applicable

Reason for support/opposition: Please summarise (in one paragraph) the key reason(s)

Presently, gas deliveries into the St Fergus Shell terminal are artificially constrained below the statutory upper Wobbe limit of 51.41MJ/M³ by legacy network entry arrangements. Increasing the upper Wobbe limit as proposed will facilitate increased flows of gas into the GB gas network. While these additional flows may be small compared to national demand levels, they will nevertheless provide additional security of supply at a time when it is badly needed, and in doing so will tend to apply downward pressure on wholesale energy prices to the benefit of end consumers.

Aligning the Shell terminal upper Wobbe limit more closely with network entry arrangements enjoyed at other GB delivery facilities will also better secure effective competition between gas shippers, to the benefit of Relevant Objective (d).

Self-Governance Statement: Please provide your views on the self-governance statement.

We agree that this proposal should be subject to industry self-governance arrangements. It represents a small change to the upper Wobbe index at one terminal, thereby better aligning with competing terminals, and it does so on a time limited basis. The impact upon end consumers is likely to be small but positive. These benefits should be realised as quickly as possible and this is best achieved through self-governance arrangements.

Implementation: What lead-time do you wish to see prior to implementation and why?

As soon as possible.

Impacts and Costs: What analysis, development and ongoing costs would you face?

None.

Legal Text: Are you satisfied that the legal text will deliver the intent of the Solution?

N/A – no change to Code legal text is required.

Are there any errors or omissions in this Modification Report that you think should be taken into account? Include details of any impacts/costs to your organisation that are directly related to this.

No.

Please provide below any additional analysis or information to support your representation

N/A.

Representation - Draft Modification Report UNC 0826S Amendment to Network Entry Provision at Shell St Fergus Terminal

Responses invited by: 5pm on 08 December 2022

To: enquiries@gasgovernance.co.uk

Please note submission of your representation confirms your consent for publication/circulation.

Representative:	Martin Cahill
Organisation:	National Grid
Date of Representation:	02/12/2022
Support or oppose implementation?	Support
Relevant Objective:	a) Positive d) Positive
Relevant Charging Methodology Objective:	Not Applicable

Reason for support/opposition: Please summarise (in one paragraph) the key reason(s)

National Grid strongly support the proposed modification, on the basis that it provides equitability with other suppliers, it is unlikely to have any material impact on downstream parties, and there are robust and established safety measures to manage the Gas Quality parameters at entry points.

The current GS(M)R specification states that gas conveyed within the system are within an upper Wobbe limit of 51.41 MJ/m3 and a lower limit of 47.20 MJ/m3. Shell are proposing are proposing an increase to their contractual limit of 51.4 MJ/m3, which is therefore within the accepted GS(M)R range.

For reference, although it will not need to be used when operations are within the proposed limits, National Grid use the TFA (Terminal Flow Advice) process at every entry point on the NTS to manage the risk of any non-compliant gas being transported.

The key safety measures used in the TFA process are as follows (please also refer to figure 1 for a visual representation and reference points):

1. Gas from all 3 sub-terminals is commingled at the National Grid owned St Fergus asset* before it reaches the NTS. This reduces the risk of any non-compliant gas on the network if a supplier is close to or above the specified Wobbe limit

- 2. A high value (before reaching a breach) on any Wobbe reading at Qa, Qb, or Qc will initiate a warning call from GNCC to the supplier, and a discussion as to the cause of the issue and expected resolution
- 3. A 15 minute warning is applied if there is a breach at Qa, Qb or Qc, provided that Qabc is within specification (Qabc is the commingled point which is representative of the gas which will be supplied to the NTS)
- 4. If a supplier is not back within specification within 15 minutes, curtailment action will be taken by GNCC to reduce flow
- 5. More immediate action will be taken by GNCC if there is a risk of a breach at Qabc
- 6. Monitoring of individual supply meters and commingled gas provides additional contingency for any monitoring error. National Grid also regularly calibrates equipment and investigates any discrepancies against supplier readings
- * It should be noted that the Distribution Network Offtake at St Fergus also receives gas which has been commingled

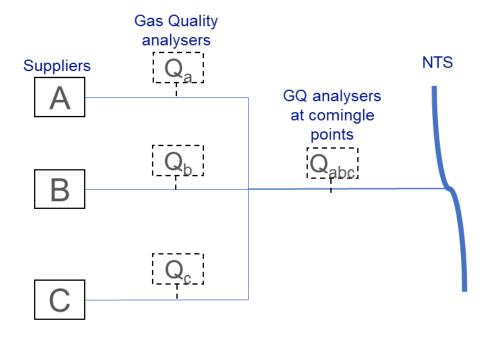


Figure 1 Flow Diagram

Relevant Objectives

National Grid agrees with Shell's statement that the proposed modification meets the relevant objective a) Efficient and economic operation of the pipe-line system. Whilst we cannot comment on the specifics of Shell's operations, it is well established that wider Wobbe range can, in certain circumstances, increase available supply. This is a concept used as part of the Network Gas Supply Emergency, whereby in stage 1 a wider Wobbe range can be used to maximise flows onto the NTS. It has also been explored as part of the GS(M)R review, which proposes to permanently decrease the lower limit.

National Grid also agree that the proposed modification mees relevant objective d) securing of effective competition. The proposed limit is in line with other network entry agreements, and is compliant with GS(M)R.

As this modification is designed to increase available supply, it also demonstrates a benefit for the consumer by increasing security of supply.

Self-Governance Statement: Please provide your views on the self-governance statement.

This change would be compliant with GS(M)R and we believe will not have any material impact on downstream parties. It is in line with other Network Entry Agreements and as such is suitable for self-governance.

Implementation: What lead-time do you wish to see prior to implementation and why?

This is an 'enabling Modification'; it will enable a change to the Network Entry Provisions that apply between National Grid NTS and Shell at St Fergus, and could be implemented once the appeal window that applies to self-governance modifications has passed.

Impacts and Costs: What analysis, development and ongoing costs would you face?

There will be some minor resource impacts and costs incurred to carry out administrative arrangements for this change to be made, for example SCADA alarm limits and contractual agreement.

Legal Text: Are you satisfied that the legal text will deliver the intent of the Solution?

This is an enabling Modification, therefore legal text is not required.

Are there any errors or omissions in this Modification Report that you think should be taken into account? Include details of any impacts/costs to your organisation that are directly related to this.

N/A

Please provide below any additional analysis or information to support your representation

N/A

Representation - Draft Modification Report UNC 0826S Amendment to Network Entry Provision at Shell St Fergus Terminal

Responses invited by: 5pm on 08 December 2022

To: enquiries@gasgovernance.co.uk

Please note submission of your representation confirms your consent for publication/circulation.

Representative:	Christiane Sykes
Organisation:	Shell Energy Europe Limited (SEEL)
Date of Representation:	5 December 2022
Support or oppose implementation?	Support
Relevant Objective:	a) Positived) Positive
Relevant Charging Methodology Objective:	Not Applicable

Reason for support/opposition: Please summarise (in one paragraph) the key reason(s)

Shell Energy Europe Limited (SEEL) supports this proposed modification for the reasons set out in our proposal.

According to Ofgem figures, the average British household uses 14900 kWh/yearⁱ (0.05364 TJ/year) of energy (gas and electricity combined). This proposal could, therefore, increase deliveries to the NTS to meet the demand of 136,000-204,000 households per year, which would benefit UK energy supply security.

As National Grid states in their Gas Winter Outlook 2022/23, the 'potential for a shortfall in gas supplies within continental Europe could have a range of knock-on impacts in Great Britain, creating risks around the ability of GB to import from continental Europe if requiredⁱⁱ. In light of the current market uncertainty, fine-tuning our St Fergus operations will enable Shell to provide more energy to the NTS, which will help to mitigate at least some of the risk this winter related to a reduction in gas supplies to continental Europe.

This proposal better facilitates the Transporters' Relevant Objectives:

Securing of effective competition between relevant shippers: by levelling the playing field and preventing discrimination through aligning the Shell St Fergus Upper WI limit with the GS(M)R legislation and with other terminals delivering gas onto the NTS, consistent with the standard Network Entry Agreement limit and within the existing GS(M)R range.

Efficient and economic operation of the pipe-line system: by facilitating increased energy to be processed through the existing network infrastructure than would otherwise be the case.

Should the change not be made then Shell St Fergus will continue to operate within its current Wobbe Index limit, which in turn will limit the ability to optimise energy delivered to National Grid.

We note National Grid's assessment of this proposal, presented in the November Transmission Working Group that in their view, this is a low impact change to equalise the Wobbe spec for Shell with other terminals and, therefore, they do not believe there would be value in lengthening the timeframe for this Modification's passage through the governance process by completing network penetration analysis in this caseⁱⁱⁱ.

Self-Governance Statement: Please provide your views on the self-governance statement.

The Modification would have no detrimental impact on competition and is not deemed material due to other network entry parties already operating to the requested increased Wobbe Index limit.

No other pipeline incomers entering the NTS at St Fergus have gas sources above the existing GS(M)R Wobbe Index upper limit, therefore this amendment will not unduly discriminate.

The modification: is unlikely to have a material effect on:

- (a) existing or future gas consumers; and
- (b) competition in the shipping, transportation or supply of gas conveyed through pipes or any commercial activities connected with the shipping, transportation or supply of gas conveyed through pipes; and
- (c) the operation of one or more pipe-line system(s); and
- (d) matters relating to sustainable development, safety or security of supply, or the management of market or network emergencies; and
- (e) the uniform network code governance procedures or the network code modification procedures; and is unlikely to discriminate between different classes of parties to the uniform network code/relevant gas transporters, gas shippers or DN operators.

Implementation: What lead-time do you wish to see prior to implementation and why?

Should the Modification Panel make a determination to implement this Proposal, no further development is required so the proposer is seeking implementation as soon as possible in order to increase energy deliveries without delay.

Impacts and Costs: What analysis, development and ongoing costs would you face?

No detrimental impact or increase in costs for other network users is foreseen by implementation of this proposal on the basis of the minor increase in the Upper WI limit;

the relatively small percentage increase in energy and volumes, compared to overall St Fergus volumes / energy content and comingling with other gases before entering the NTS, all of which are within the GS(M)R limit.

Legal Text: Are you satisfied that the legal text will deliver the intent of the Solution?

No change to the text of the UNC is required since this is an enabling Modification in accordance with UNC Transportation Principal Document Section I 2.2.3 (a).

Are there any errors or omissions in this Modification Report that you think should be taken into account? Include details of any impacts/costs to your organisation that are directly related to this.

No.

Please provide below any additional analysis or information to support your representation

i https://www.ofgem.gov.uk/sites/default/files/docs/2020/01/tdcvs_2020_decision_letter_0.pdf

ii https://www.nationalgrid.com/gas-transmission/document/140921/download

iii https://www.gasgovernance.co.uk/sites/default/files/ggf/2022-10/6.2%20UNC0826%20-%20NG%20view.pdf