UNC	Modification	At what stage is this document in the process?		
U	NC 0XXX:	01 Modification 02 Workgroup Report		
Improvements to Margins Notice Arrangements		03 Draft Modification Report 04 Final Modification		
Purpose of Modification: To make a number of improvements to the arrangements for National Grid NTS provision of Margins Notices (UNC TPD V5.9.3) and introduce a new 'early warning' notice as per the recommendations of Request 0669R. The Proposer recommends that this modification should be:				
	 subject to self-governance; and proceed to Consultation This modification will be presented by the Proposer to the Panel on 18 July 2019. The Panel will consider the Proposer's recommendation and determine the appropriate route. 			
0	High Impact:			
	Medium Impact: GB gas market participants, National Grid NTS			
0	Low Impact:			

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Timetable

The Proposer recommends the following timeta	Transporter:	
Modification Proposal presented to Panel	18 July 2019	National Grid NTS
Draft Modification Report issued for consultation	19 July 2019	email addres
Consultation Close-out for representations	8 August 2019	
Final Modification Report available for Panel	9 August 2019	telephone
Modification Panel decision	15 August 2019	Systems Provider:



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1 Summary

What

Uniform Network Code TPD Section V5.9 ('Operational and Market Data') includes an obligation for National Grid NTS to issue a notice to the market (a '**Margins Notice**') where the forecast demand for a gas flow day is equal to, or greater than, the expected available supply for that gas flow day. This effectively signals to market participants that they may need to either source more gas or limit demand to avoid a supply / demand imbalance on the following day.

The expected levels of non-storage sources of supply comprising UK Continental Shelf (UKCS), Norway, Interconnectors and Liquified Natural Gas (LNG) are set by National Grid NTS ahead of each winter as part of its Winter Outlook process. National Grid NTS has discretion to adjust these levels as the winter progresses, though has experienced challenges in what to assume for the more flexible sources. Greater transparency and dynamism for these calculations would therefore be desirable.

Why

A UNC Request Workgroup established to review the robustness and effectiveness of the existing 'Margins Notice' and 'Gas Deficit Warning' processes identified that the existing information provided to Users of the NTS in the event that forecast levels of demand are approaching the expected available supply, and the process for determining the expected available supply, can be improved.

How

It is proposed that the UNC is modified to:

- oblige National Grid NTS to issue a new early warning notification of a reducing gap between forecast demand and expected available supply (within the Winter Period);
- include a specific method for establishing the expected level of supply from LNG terminals;
- limit the need to evaluate whether a Margins Notice needs to be issued to the Winter Period;
- oblige National Grid NTS to monitor the non-storage supply position during the Winter Period.

2 Governance

Justification for Self-Governance

National Grid NTS believes that implementation of this Proposal is unlikely to have a *material* effect on gas consumers, competition and commercial activities in shipping or transportation, operation of pipeline systems, sustainable developments and safety procedures and UNC governance procedures. Further, implementation is unlikely to discriminate between different classes or parties.

This is on the basis that the changes proposed represent incremental improvements to the existing information made available to the market where the difference between supply and demand is narrowing. Whilst the effect of these revisions is expected to be non-material, they are nevertheless expected to represent an improvement when compared to the current arrangements.

Requested Next Steps

The nature of this Proposal has been discussed and developed in Request Workgroup 0669R and is intended to be implemented for winter 2019/20. It is therefore recommended that this modification should:

- be considered a non-material change and subject to self-governance
- proceed to Consultation

3 Why Change?

Context

As the gas System Operator, National Grid NTS has two main tools to provide notice to GB gas market participants of a possible imbalance between gas demand and supply on the Total System:

- Margins Notice issued if forecast demand for the day ahead exceeds a pre-defined forecast of supply; and
- **Gas Deficit Warning** issued if there is a more serious supply and demand imbalance leading to a material risk to the end of day balance on the NTS.

Request 0669R

National Grid NTS raised Request 0669R '*Review of the Gas Deficit Warning (GDW) and Margins Notice (MN) Arrangements*' in order to review the processes, timeliness, and information provision associated with National Grid's gas security of supply notices and to review the name of the Gas Deficit Warning notice. National Grid NTS considered that the time was right to review these notification arrangements with the industry, to share learnings from operational experience on 1 March 2018 (when the Total System conditions necessitated the issue of a Gas Deficit Warning for the first time) and improve the arrangements for the future.

One of the Request Workgroup's conclusions was that reforms to the arrangements for the issue of a MN and introduction of a new 'early warning' notice would represent an improvement to the current arrangements by enhancing the accuracy of the non-storage supply position and enabling a timelier response by the market to address the supply / demand position. This Proposal seeks to implement these recommendations.

The existing arrangements for the provision of MN are detailed in TPD V5.9.3.

If these proposed changes are not implemented, the improvements to the existing arrangements (as identified in the course of Request Workgroup 0669R) will not be realised and therefore compromise the capability of the commercial arrangements and processes to address the supply / demand position.

This Proposal

In respect of the four changes proposed:

• Additional 'early warning' notification of a reducing gap between expected available supply and forecast demand within the Winter Period

As a MN is only issued where forecast demand is expected to be equal to or greater than expected available supply, the proposed additional notification will provide an 'early warning' to Users that forecast demand is *approaching* the expected levels of supply which may therefore lead to the subsequent issue of a Margins Notice if not addressed. A supply usage level of 95% was identified by the 0669 Request Workgroup as the appropriate 'trigger' for the new notice. The rationale for

limitation of this notice to the Winter Period is as described below in the section '*Limit the use of Margins Notices to the Winter Period*';

• Specific method determining the LNG contribution to non-storage supplies

The 0669 Request Workgroup considered how best to determine the LNG element of 'Expected Available Supply' which is assessed in the determination of whether a Margins Notice is issued. The 0669 Request Workgroup concluded that the methodology contained in this Proposal would represent an improvement to the status quo and that it should be explicitly detailed in the UNC.

• Limit the use of Margins Notices to the Winter Period

The MN is an early indicator of whether there is likely to be a deficit of supply compared to forecast demand. The behaviours of storage sites and IUK interconnector change on a seasonal basis, shifting from predominantly delivering gas to the NTS during winter to predominately demand points during summer¹. Such shifts in behaviour can obscure the MN assessment by 'artificially' increasing national demand and therefore a MN issued in these circumstances could be misleading. For the summer months, in periods of tight margins it is likely that most of these facilities could revert to a behaviour more in keeping with the winter months thereby reducing demand and increasing supply on a national level.

• Monitoring Obligation for Non-Storage Supplies

National Grid NTS monitors the non-storage supply position during the Winter Period and the 0669R Workgroup considered that National Grid NTS should have a UNC obligation to reflect this.

4 Code Specific Matters

Reference Documents

Information about National Grid's gas notifications is contained on its website at:

https://www.nationalgrid.com/uk/gas/balancing/margins-notices-mn-and-gas-deficit-warnings-gdw

Information regarding Request 0669R is contained on the Joint Office website at:

http://www.gasgovernance.co.uk/0669

Knowledge/Skills

A working knowledge of National Grid NTS' procedures and tools to provide notice to GB gas market participants of a possible imbalance between gas demand and supply, together with knowledge of the events of 1 March 2018 and immediate reporting thereof would be helpful in assessing this Modification.

https://www.nationalgridgas.com/sites/gas/files/documents/Gas%20Ops%20Forum%20full%20pack%20%20-%20April%202018.pdf

¹ It is anticipated that the BBL interconnector also will become bi-directional in the near future.

5 Solution

The proposed solution comprises four elements:

1) New 'Early Warning' Notice

Where, after forecasting demand (on the Preceding Day) for a Gas Flow Day, the Forecast Total System Demand for that Gas Flow Day will be equal to or exceed 95% of the Expected Available Supply for that Gas Flow Day, a new obligation is to be included in the UNC for National Grid NTS to issue an **Active Notification Communication** via the **Active Notification System** to so inform Users. This requirement will only be applicable to Gas Flow Days falling within the Winter Period (i.e. 1 November in any year until 30 April in the following year).

2) Margins Notice – Determination Period

It is proposed that the existing provisions in TPD V5.9.3, which require National Grid NTS to assess whether it is necessary to publish a **Margins Notice** if the specified conditions are met (which is currently applicable to all days in the year), are modified to limit this requirement to Gas Flow Days falling within the Winter Period (i.e. 1 November in any year until 30 April in the following year).

3) Margins Notice – LNG Expected Available Supply

It is proposed that the means of determining the **LNG** element of Expected Available Supply (as per TPD V5.9.7(a)) is specified in the UNC. It is proposed that the LNG Expected Available Supply in respect of a Gas Flow Day (LNG_d) is equal to:

$$LNG_d = Min\left[ECWC_d, \frac{US_d}{2}\right]$$

where:

Min means the lower of

- *ECWC*^d means the Expected Cold Weather Capability at all LNG Importation Facilities for the Gas Flow Day which is equal to the 95th percentile of all Entry Point Daily Quantity Delivered in respect of all LNG Importation Facilities (for delivery to the Total System) within the Winter Period (i.e. 1 November in any year until 30 April in the following year).in the previous three Gas Years;
- US_d means the Usable Stock at all LNG Importation Facilities for the gas flow day which is equal to:

$$US_d = SL_d - MSTL_d$$

where:

- SL_d means the aggregate volumes of gas at each LNG Importation Facility for the relevant Gas Flow Day as notified to National Grid NTS by each of the relevant Delivery Facility Operator/s; and
- *MSTL*_d means the aggregate of the volumes of gas determined as the minimum storage tank level at each LNG Importation Facility (and therefore not available for withdrawal)

determined by National Grid NTS on 1st October each year as the lowest stock level at each LNG Importation Facility in the previous three Gas Years, reduced by the quantity of gas National Grid NTS reasonably expects would have been subject to boil-off over a period of 18 days.

4) Monitoring Obligation

It is proposed that National Grid NTS be obliged to regularly monitor and, if required, amend the nonstorage supplies that are expected to be available from the UK Continental Shelf, Norway and interconnectors. This requirement will only be applicable to Gas Flow Days falling within the Winter Period (i.e. 1 November in any year until 30 April in the following year).

6 Impacts & Other Considerations

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

No.

Consumer Impacts

National Grid NTS expects that end consumers will benefit from this Modification if timely issue of the proposed early warning notification and MN (under the revised conditions) solicits the desired response from the market and avoids the necessity of issuing a Gas Deficit Warning². This benefit is likely to accrue from a reduced risk of exposure to within-day gas price spikes resulting from a proportionate market response to this market message.

EU Code Impacts

None.

Central Systems Impacts

None.

7 Relevant Objectives			
Impact of the modification on the Relevant Objectives:			
Relevant Objective	Identified impact		
a) Efficient and economic operation of the pipe-line system.	Positive		
b) Coordinated, efficient and economic operation of	Positive		
(i) the combined pipe-line system, and/ or			

² UNC Modification Proposal 0685 advocates changing the name of this notification to 'Gas Balancing Notification'

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	(ii) the pipe-line system of one or more other relevant gas transporters.	
c)	Efficient discharge of the licensee's obligations.	Positive
d)	Securing of effective competition: (i) between relevant shippers; (ii) between relevant suppliers; and/or	None
	(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.	Positive
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

National Grid NTS considers that this Modification would better facilitate the following relevant objectives:

- a) Efficient and economic operation of the pipe-line system.
- b) Coordinated, efficient and economic operation of
- (i) the combined pipe-line system, and/ or
- (ii) the pipe-line system of one or more other relevant gas transporters.

This Modification is designed to enhance the value of information provided to Users of the Total System by providing greater clarity in respect of the expected balancing position (between gas supply and gas demand) on the relevant Gas Flow Day. The combination of an 'earlier' notification that demand levels are approaching the total level of supplies, combined with an enhanced method of assessing LNG supplies (to inform the MN position) will provide clearer and more accurate picture of the overall supply / demand position and enable the market to respond more efficiently, limiting the need for National Grid NTS to intervene in the market as residual balancer and thereby enabling the system to be operated more efficiently.

Given that the balancing position that is communicated is in respect of the Total System, limiting the need for National Grid NTS to intervene in the market represents a more efficient outcome for the *combined* pipe-line system as a whole.

c) Efficient discharge of the licensee's obligations.

Provision of an enhanced level of information to Users of the Total System enable the market to respond more efficiently to the overall supply / demand position is entirely consistent with National Grid's licence obligation under Standard Special Condition A17(1) to "*act in a reasonable and prudent manner in the operation of the pipe-line system … in so far as such operation may affect the operation of the pipe-line system of any other relevant gas transporter*".

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.

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Earlier and more informed representation of the supply / demand position will better facilitate price discovery that reflects market fundamentals, thereby helping to appropriately incentivise relevant suppliers to make adequate provision in their gas supply arrangements for peak demand days.

8 Implementation

No material implementation costs are expected. National Grid NTS will need make the necessary changes to enable provision of the additional early warning notice and calculation of the LNG supply volume in line with the new methodology. Other stakeholders may wish to reflect the potential for National Grid to issue the additional early warning notice in their procedures and systems.

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

No specific implementation date is proposed, however, implementation by 1 November 2019 would be desirable to realise the benefits of this Modification for the forthcoming Winter Period 2019/20.

9 Legal Text

Text Commentary

Insert text here

Text

Insert text here

10 Recommendations

Proposer's Recommendation to Panel

Panel is asked to:

- Agree that self-governance procedures should apply
- Issue this modification directly to Consultation