

UNC Final Modification Report		At what stage is this document in the process?
<h1>UNC 0698S:</h1> <h2>Improvements to Margins Notice Arrangements</h2>		<div style="display: flex; flex-direction: column; gap: 5px;"> <div style="border: 1px solid #ccc; border-radius: 5px; padding: 5px; display: flex; align-items: center; gap: 5px;"> <span style="border: 1px solid #ccc; border-radius: 50%; padding: 2px 5px;">01</span> Modification         </div> <div style="border: 1px solid #ccc; border-radius: 5px; padding: 5px; display: flex; align-items: center; gap: 5px;"> <span style="border: 1px solid #ccc; border-radius: 50%; padding: 2px 5px;">02</span> Workgroup Report         </div> <div style="border: 1px solid #ccc; border-radius: 5px; padding: 5px; display: flex; align-items: center; gap: 5px;"> <span style="border: 1px solid #ccc; border-radius: 50%; padding: 2px 5px;">03</span> Draft Modification Report         </div> <div style="border: 1px solid #ccc; border-radius: 5px; padding: 5px; display: flex; align-items: center; gap: 5px;"> <span style="border: 1px solid #ccc; border-radius: 50%; padding: 2px 5px;">04</span> Final Modification Report         </div> </div>
<p><b>Purpose of Modification:</b></p> <p>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.</p>		
	Panel consideration is due on 15 August 2019 <i>(at short notice by prior agreement)</i>	
	High Impact:	
	Medium Impact: GB gas market participants, National Grid NTS	
	Low Impact:	

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Timetable		
<b>Modification timetable:</b>		
Modification Proposal presented to Panel	18 July 2019	
Draft Modification Report issued for consultation	18 July 2019	
Consultation Close-out for representations	08 August 2019	
Final Modification Report available for Panel	09 August 2019	
Modification Panel decision	15 August 2019	

 Any questions?

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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 Liquefied 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, although National Grid NTS 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 0669R was established to review the robustness and effectiveness of the existing 'Margins Notice' and 'Gas Deficit Warning' processes. This 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:

- Introduce a new obligation on National Grid NTS to issue a new early warning notification of a reducing gap between forecast demand and Expected Available Supply (within the winter);
- Limit the need to evaluate whether a Margins Notice needs to be issued to the winter;
- Include a specific method for establishing the expected level of supply capability from LNG terminals; and
- Introduce a new obligation on National Grid NTS to monitor the non-storage supply position during the winter.

## 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 in relation to the self-governance criteria, they are nevertheless expected to represent an improvement when compared to the current arrangements.

## Requested Next Steps

The nature of this Proposal has in large part been discussed and developed in Request Workgroup 0669R and is intended to be implemented for winter 2019/20. Elements of the proposed solution that have developed by National Grid NTS post 0669R discussions are explained towards the end of Section 4.

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 (MN)** – issued if forecast demand for the day ahead exceeds a pre-defined expectation of supply capability; and
- **Gas Deficit Warning (GDW)** – 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 NTS' 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 the operational experience on 01 March 2018 (when the Total System conditions necessitated the issue of a Gas Deficit Warning for the first time) and hence improve the arrangements for the future.

One of the Request Workgroup's conclusions was that reforms to the calculation of non-storage sources of supply that contribute to the MN value and introduction of a new 'early warning' notice would represent an improvement to the current arrangements by establishing a lower, more realistic expectation 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 MNs 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

Four changes are proposed in this Modification:

- *Additional new 'early warning' notification of a reducing gap between expected available supply and forecast demand within winter*

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 additional 'early warning' to Users. This will indicate 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. This new notification will be an

obligation on National Grid NTS detailed in the UNC. A supply usage level of 95% was identified by the 0669 Request Workgroup as the appropriate 'trigger' for the new notification. The rationale for limitation of this notification to the winter is as described below in the section '*Limit the use of Margins Notices to the winter*';

- *Limit the use of Margins Notices to the winter*

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 summer<sup>1</sup>. 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 expected 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.

- *Specific method for 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 a methodology similar to that contained in this Proposal would represent an improvement to the status quo and that it should be explicitly detailed in the UNC.

The methodology proposed would take the lesser of an expected capability based on historical LNG flows and an assumed quantity of usable stock (i.e. prevailing quantities of gas in the tanks less operating reserve) divided by 2. The usable stock is divided by 2 to be consistent with the existing calculation for the inclusion of storage deliverability within the Expected Available Supply. At present, under TPD V5.9.7 the deliverability from storage is included within the Expected Available Supply if there is sufficient gas-in-storage within the facility to deliver gas to the NTS at maximum rate over 2 full days. Dividing the LNG usable stock by 2 reflects the same principle and would have resulted in the 3 Margins Notices being issued in February and March 2018 if this proposed methodology had been in place at that time.<sup>2</sup>

The methodology further proposes that the operating reserve (or minimum storage tank level) in the tanks should be determined based on historical low levels observed, reduced by boil-off that could reasonably be expected over an 18 day period. (18 days is an assumed voyage and unloading period of time within which a new LNG cargo could be expected to travel from its source location to its arrival at a GB LNG terminal).

Workgroup discussion did, however, consider the potential for cold weather to extend into April and that it may be therefore be desirable for National Grid NTS to have the option of extending the application of the Margins Notice (and 95% trigger) accordingly, which is reflected in this Proposal.

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<sup>1</sup> It is anticipated that in addition to the IUK interconnector which is bi-directional, the BBL interconnector also will become bi-directional in the near future.

<sup>2</sup> [https://gasgov-mst-files.s3.eu-west-1.amazonaws.com/s3fs-public/ggf/book/2019-06/0669R%20-%20MN%20and%20GDW%20Review\\_8th%20Workgroup%20slides%20-%20June%202019v2.0.pdf](https://gasgov-mst-files.s3.eu-west-1.amazonaws.com/s3fs-public/ggf/book/2019-06/0669R%20-%20MN%20and%20GDW%20Review_8th%20Workgroup%20slides%20-%20June%202019v2.0.pdf) (slide 12)

### Additional methodology proposals in relation to minimum storage tank levels developed by National Grid NTS after 0669R Workgroup discussions

It is proposed that the minimum storage tank levels are determined based on LNG inventories up to and including 15 September in the current Gas Year and in each of the two prior Gas Years. This will allow a two-week window between 16 September and 29 September for National Grid NTS to calculate the minimum storage tank level in time for the Margins Notice process to commence on 30 September for Gas Day 01 October. It is further proposed that the minimum storage tank level for each LNG facility is capped at the level determined for the October 2019 to March 2020 period. This is to cover against the possibility of high LNG stocks being maintained year on year into the future and a consequent overstatement of minimum storage tank levels, which in turn would result in an unwarranted decrease in the usable stock and increased likelihood of triggering a Margins Notice.

- *Monitoring Obligation for Non-Storage Supplies*

National Grid NTS monitors the non-storage supply position during the winter 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-%20April%202018.pdf>

## 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 be applicable to Gas Flow Days falling within the winter (i.e. 1 October in any year until 31 March in the following year). At its discretion, National Grid NTS may extend this requirement by one month (i.e. until the Gas Flow Day that ends on 1 May.)

## 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 (i.e. 1 October in any year until 31 March in the following year). At its discretion, National Grid NTS may extend this requirement by one month (i.e. until the Gas Flow Day that ends on 1 May).

## 3) Margins Notice – LNG Expected Available Supply

It is proposed that the method to be used for the determination of 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:

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

where:

$\text{Min}$  means the lower of

$ECWC_d$  means the expected cold weather capability for all LNG Importation Facilities for the Gas Flow Day which is equal to:

$$ECWC_d = \sum SEPLIF_p$$

where:

$\sum$  means the sum across all relevant System Entry Points;

$SEPLIF_p$  means the 95<sup>th</sup> percentile of the Entry Point Daily Quantity Delivered at a System Entry Point of an LNG Importation Facility (for delivery to the Total System) within the winter (i.e. 1 October in any year until 31 March in the following year) in the previous three Gas Years;

$US_d$  means the aggregate 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 Operators; and

$MSTL_d$  means National Grid NTS's determination of the aggregate of an amount of gas in respect of each LNG Importation Facility which is equal to the lowest volume of gas which has been held in stock at that facility at any time up to and including 15

September in the current Gas Year and in each of the whole of the previous two Gas Years, provided that (i) such lowest volume of gas shall be reduced by the amount which National Grid NTS reasonably believes would have boiled off over the following 18 days at that facility; and (ii) where the value determined for that facility for the purposes of this MSTL<sub>d</sub> calculation exceeds the value so determined for the period commencing at 05:00 on 1 October 2019 and ending at 05:00 on 1 April 2020, the value so determined for the period commencing at 05:00 on 1 October 2019 and ending at 05:00 on 1 April 2020 shall apply.

#### 4) Monitoring Obligation

It is proposed that National Grid NTS be obliged to regularly monitor and, if required, amend the non-storage 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 (i.e. 01 October in any year until 31 March in the following year). At its discretion, National Grid NTS may extend this requirement by one month (i.e. until the Gas Flow Day that ends on 1 May).

## 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 Warning<sup>3</sup>. 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.

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<sup>3</sup> UNC Modification Proposal 0685 advocates changing the name of this notification to 'Gas Balancing Notification'

## 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.	<b>Positive</b>
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.	<b>Positive</b>
c) Efficient discharge of the licensee's obligations.	<b>Positive</b>
d) Securing of effective competition: (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.	None
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

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 a 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.

The balancing position that is communicated is in respect of the Total System. This limits the need for National Grid NTS to intervene in the market which 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 enables the market to respond more efficiently to the overall supply / demand position. This 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”.

## 8 Implementation

National Grid NTS will need to make the necessary changes to enable provision of the additional early warning notice and calculation of the expected LNG supply volume in line with the new methodology. Other stakeholders may wish to reflect the potential for National Grid NTS to issue the additional early warning notice in their procedures and systems. The costs of these two changes are not currently expected by National Grid NTS to be material.

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 01 October 2019 would be desirable to realise the benefits of this Modification for the forthcoming winter 2019/20.

## 9 Legal Text

### Text Commentary

Paragraph of TPD V	Explanation
5.9.3	Limits the period within which National Grid NTS is required to make assessments described in 5.9.3(a) and 5.9.3(b) to the winter period which, for the purposes of this Proposal, is October to March (inclusive)
5.9.3 (a)	National Grid NTS determines whether forecast demand is greater than, or equal to, 95% of expected supply.
5.9.3 (b)	National Grid NTS determines whether forecast demand is greater than, or equal to expected supply.
5.9.4 (a)	If 95% trigger referred to in 5.9.3(a) is reached, Users are notified.
5.9.4 (b)	If 100% trigger referred to in 5.9.3(b) is reached, a Margins Notice is published.
5.9.5	Enables National Grid NTS, at its discretion to extend the period in 5.9.3 to include April.
5.9.6 – 5.9.9	Paragraph re-numbering (formerly paragraphs 5.9.4 – 5.9.7) as a consequence of insertion of new paragraphs 5.9.4 and 5.9.5

5.9.9 (a) (i)	<p>This takes expected supply from the UK Continental Shelf, Norway and Interconnectors (but not LNG importation) during a winter period to determine Expected Available Supply.</p> <p>Requires National Grid to monitor these expected delivery volumes and revise its expectations where required.</p>
5.9.9 (a) (ii)	<p>The formula is a means of calculating expected supply from LNG importation to determine Expected Available Supply.</p> <p>Principally, this is equal to the lower of:</p> <ul style="list-style-type: none"> <li>• the expected cold weather capability at all LNG facilities (based on retrospective deliveries to the NTS over the past three winter periods); and</li> <li>• actual LNG volumes in stock and available for delivery to the NTS on the relevant Gas Flow Day</li> </ul>

**Text**

**Transportation Principal Document, Section V: General**

Amend paragraph 5.9 as follows:

**“5.9 Operational and Market Data**

5.9.1 Subject to the provisions of paragraph 5.9.2 and the other provisions of the Code, National Grid NTS shall arrange for the data referred to in Annex V-1, (“**Operational and Market Data**”) to be published or made available in the manner specified in Annex V-1.

5.9.2 National Grid NTS shall not be obliged to publish or make available operational and market data pursuant to paragraph 5.9.1 where that data is not available to National Grid NTS.

5.9.3 After forecasting demand in accordance with Section H 5.2.3 and Section H5.2.4 for each Gas Flow Day in the period commencing at 05:00 on 1 October and ending at 05:00 on 1 April, on the Preceding Day National Grid NTS shall determine whether ~~issue (by means of publication on its website) a notice (a “Margins Notice”) where, after forecasting demand for a Gas Flow Day in accordance with Section H 5.2.3 and Section H5.2.4 on the Preceding Day,~~ the Forecast Total System Demand for the Gas Flow Day in question is:

- (a) greater than, or equal to, 95% of the Expected Available Supply for such Gas Flow Day
- (b) greater than, or equal to, the Expected Available Supply for such Gas Flow Day.

5.9.4 National Grid NTS shall:

- (a) where the threshold in paragraph 5.9.3(a) is reached, issue an Active Notification Communication by means of the Active Notification System informing Users of its determination; and
- (b) where the threshold in paragraph 5.9.3(b) is reached, issue (by means of publication on its website) a notice informing Users of its determination (a “Margins Notice”).

5.9.5 National Grid NTS may, in its sole discretion, extend the period within which it shall make determinations pursuant to paragraph 5.9.3 (and where necessary issue notices pursuant to 5.9.4) to end at 05:00 on 1 May.

- 5.9.46 Where a Margins Notice is issued, it shall remain in force until the end of the Gas Flow Day to which it is applicable, unless superseded by a Gas Deficit Warning.
- 5.9.57 National Grid NTS may issue (by means of publication on its website) a warning (“**Gas Deficit Warning**”) where during or before a Gas Flow Day, an event affecting either supply or demand, for the Gas Flow Day in question is notified to National Grid NTS, or National Grid NTS otherwise becomes aware of circumstances, that may (in the reasonable opinion of National Grid NTS) result in the quantities of gas on the Total System being insufficient for the purpose of meeting the Forecast Total System Demand. The issue of a Gas Deficit Warning by National Grid NTS shall indicate the start of a Voluntary DSR Period for the purposes of Section D5.
- 5.9.68 Where a Gas Deficit Warning is issued, it shall remain in force until National Grid NTS issues a GDW Withdrawal Notice.
- 5.9.79 For the purposes of the Code:

(a) “**Expected Available Supply**” shall mean the sum of:

- (i) ~~the amount of gas National Grid NTS reasonably expects could be delivered onto the Total System from non-storage sources (taking into consideration all information available to it) from time to time as published on its website~~ (having taken into consideration all relevant information available to it, closely monitored the position and adjusted appropriately from time to time), the UK Continental Shelf, Norway and Interconnectors shall be capable of delivering onto the Total System on any Gas Flow Day in the period commencing at 05:00 on 1 October and ending at 05:00 on 1 April (as this period may be extended under paragraph 5.9.5), as published on its website;
- (ii) an aggregate amount of gas which LNG Importation Facilities shall be deemed capable of delivering onto the Total System on any Gas Flow Day in the period commencing at 05:00 on 1 October and ending at 05:00 on 1 April (as this period may be extended under paragraph 5.9.5), (“LNG<sub>d</sub>”) determined as follows:

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

where:

Min means the lower of:

ECWC<sub>d</sub> means the expected cold weather capability of all LNG Importation Facilities for the Gas Flow Day which is equal to:

$$ECWC_d = \sum SEPLIF_p$$

where:

Σ means the sum of all System Entry Points comprised in all LNG Importation Facilities;

SEPLIF<sub>p</sub> means the 95th percentile of the Entry Point Daily Quantity Delivered at each System Entry Point comprised in each LNG

Importation Facility within the period commencing at 05:00 on 1 October and ending at 05:00 on 1 April in the previous three Gas Years; and

US<sub>d</sub> means the aggregate of the usable stock at each LNG Importation Facility for the Gas Flow Day which is equal to:

$$US_d = SL_d - MSTL_d$$

where:

SL<sub>d</sub> means the aggregate volume of gas in stock in the tanks of each LNG Importation Facility for the relevant Gas Flow Day as it is notified to National Grid NTS by the facility's Delivery Facility Operator; and

MSTL<sub>d</sub> means National Grid NTS's determination of the aggregate of an amount of gas in respect of each LNG Importation Facility which is equal to the lowest volume of gas which has been held in stock at that facility at any time up to and including 15 September in the current Gas Year and in each of the whole of the previous two Gas Years, provided that (i) such lowest volume of gas shall be reduced by the amount which National Grid NTS reasonably believes would have boiled off over the following 18 days at that facility; and (ii) where the value determined for that facility for the purposes of this MSTL<sub>d</sub> calculation exceeds the value so determined for the period commencing at 05:00 on 1 October 2019 and ending at 05:00 on 1 April 2020, the value so determined for the period commencing at 05:00 on 1 October 2019 and ending at 05:00 on 1 April 2020 shall apply; and

- (iii) the qualifying Storage Deliverability from relevant Storage Facilities over two (2) full Days at maximum withdrawal rates;
- (b) **"Two Day Ahead Minimum Storage Deliverability Amount"** means, a quantity of gas from the Safety Monitor for all Storage Facility Types that could be withdrawn from all relevant Storage Facility Types in two (2) Days at their respective maximum withdrawal rates; and
- (c) **"GDW Withdrawal Notice"** means a notice from National Grid NTS issued where National Grid NTS determines (in its reasonable opinion) that:
  - (i) there is no longer and actual or imminent risk to system safety; or
  - (ii) circumstances in which the quantities of gas on the Total System will be insufficient for the purpose of meeting the Forecast Total System Demand have ceased to exist.

For the purposes of this paragraph a Storage Facility will be a **"relevant"** Storage Facility if (i) it is a Storage Facility whose deliverability and/or storage space National Grid NTS has used in the calculation of the Safety Monitor and (ii) the quantity of gas stored in that Storage Facility and available for withdrawal is greater than or equal to the quantity of gas that could be withdrawn from that Storage Facility in two (2) Days at its maximum withdrawal rate."

## 10 Recommendations

### Panel's Recommendation to Interested Parties

The Panel have recommended that this report is issued to consultation and all parties should consider whether they wish to submit views regarding this self-governance modification.

## 11 Consultation

Panel invited representations from interested parties on 18 July 2019. The summaries in the following table are provided for reference on a reasonable endeavours' basis only. It is recommended that all representations are read in full when considering this Report. Representations are published alongside this Final Modification Report.

Implementation was unanimously supported in the 5 representations received.

Representations were received from the following parties:

Organisation	Response	Relevant Objectives	Key Points
Centrica	Support	a - Positive b - Positive c - Positive	<ul style="list-style-type: none"> <li>The Modification if implemented, will provide a significant improvement over the current method with a more dynamic and transparent assessment of the day-ahead forecast supply/demand situation. The introduction of a proportionate "early warning" notification will also help to alert industry to a high likelihood of an MN being issued and will provide an added impetus for corrective measures to be taken earlier than would otherwise have been the case. Positive impacts on 3 of the relevant objectives, as detailed in the workgroup report, are credible and supported.</li> <li>Believes Self-Governance procedures are appropriate.</li> </ul>
Equinor UK Ltd	Support	a - Positive b - Positive c - Positive	<ul style="list-style-type: none"> <li>Believe the industry will benefit from an improved early warning system.</li> <li>Agrees with Self-Governance with an implementation before 01 October 2019.</li> <li>Equinor requests that any new "Early Warning Notice" should stand out from the usual notifications which are sent out daily via ANS. Preferably in a different format to make it clear the message is an "Early Warning Notice".</li> <li>Once implemented, it would be prudent for National Grid NTS to run an assessment of the previous winter to check the new parameters are working in the way they were designed.</li> </ul>
National Grid	Support	a - Positive	<ul style="list-style-type: none"> <li>The enhanced information provision to the market and additional transparency will enable the market to respond</li> </ul>

		<p>b - Positive c - Positive</p>	<p>more efficiently and therefore negate the need for National Grid NTS to intervene as residual balancer thereby facilitating more efficient operation of the network.</p> <ul style="list-style-type: none"> <li>• Believes Self-Governance procedures are appropriate.</li> <li>• Noted that it would be desirable to achieve implementation in a timely manner to realise the benefits of the Modification for winter 2019/20, and that necessary changes to systems and procedures will need to be made to enable the provision of the additional early warning notice and calculation of the expected LNG supply volume in line with the new methodology.</li> </ul>
Northern Gas Networks	Support	<p>a - Positive b - Positive c - Positive</p>	<ul style="list-style-type: none"> <li>• This modification should improve the clarity and timeliness of information to Total System Users regarding the gas demand and gas supply position, thus encouraging a more efficient market response.</li> <li>• Agrees that this Modification should follow Self-Governance procedures</li> <li>• Agrees that this Modification could be implemented within 16 business days of being approved and acknowledge that implementation before 01 October 2019 would allow the benefits to be realised in the upcoming winter period.</li> </ul>
Scottish Power	Support	<p>a - Positive b - Positive c - Positive</p>	<ul style="list-style-type: none"> <li>• Consider that improved information provision, coupled with earlier notifications and a more accurate assessment of the overall supply/demand position, should allow markets to respond to circumstances in a more efficient, effective and proportionate manner.</li> <li>• Agrees that the proposal meets the relevant Self-Governance criteria.</li> <li>• Implementation by 01 October 2019 would be desirable so that the improved arrangements are in place ahead of the coming winter 2019/20.</li> </ul>

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.

## 12 Panel Discussions

### Discussion

#### Consideration of the Relevant Objectives

**Determinations**

**13 Recommendations**

**Panel Determination**