# Draft Modification Report Revision of the Gas Balancing Alert (GBA) Trigger/Safety Monitor Modification Reference Number 0257 Version 1.0

This Draft Modification Report is made pursuant to Rule 9.1 of the Modification Rules and follows the format required under Rule 9.4.

#### 1 The Modification Proposal

#### **Background to the Proposal**

The Gas Balancing Alert (GBA) was introduced in the winter of 2005/06 as a result of the implementation of Modification Proposal 061 – 'Facilitating further Demand-side response in the event that a Gas Balancing Alert is triggered' following discussion and development by the industry through the Ofgem-chaired Demand-Side Working Group.

The primary objective of the GBA was to provide a signal to the market that demand-side reduction and/or additional supplies may be required to avoid the risk of entering into a Network Gas Supply Emergency. The calculation for setting the GBA "trigger" is based on a combination of the projected available daily supplies and daily forecast demand and, the impact of a potential breach of the Safety Monitor.

In May 2009, National Grid NTS, under its obligations within UNC Section Q 5.2, issued its proposed revisions<sup>1</sup> in the use and publication of the Safety Monitor whereby a single aggregated figure would be utilised, covering all storage facilities with two or more days of deliverability, rather than multiple monitor levels covering each different Storage Facility Type (short, medium and long range storage).

The purpose of the Safety Monitor is primarily to ensure that sufficient gas is held in storage, for the duration of the Winter, which might be required to support those gas consumers that cannot be physically and verifiably isolated from the gas network within a reasonable time period under Network Gas Supply Emergency conditions.

As a result of ongoing industry discussions associated to security of supply, National Grid NTS considered that it would be helpful to undertake presentations to the Operational Forum (June 2009) and the Transmission Workstream (June 2009), regarding potential changes to the Safety Monitor methodology and the role of the GBA.

National Grid NTS advised that the intention of the proposed changes to the Safety Monitor methodology was to improve security of supply whilst at the same time, facilitating improved transparency and enhanced information provision to the market.

The revisions to the Safety Monitor methodology sought to;

http://www.gasgovernance.com/Publications/SafeMons/ Preliminary Safety and Firm Monitor Requirements 2009/10

#### 0257: Revision of the Gas Balancing Alert (GBA) Trigger/Safety Monitor

- Apportion operational storage Space equitably across all Storage sites, including those with high cycling rates, rather than apportioning over the historically determined three storage types, Long, Medium and Short range storage.
- Retain the prevailing determination of storage Space requirements but make the deliverability requirement more visible.
- Group all storage types/facilities such that one aggregated monitor for Space and one aggregate monitor for Deliverability was determined.

During these presentations, National Grid NTS indicated that it believed it would be necessary to amend the prevailing GBA calculation to ensure that it reflected the revised Safety Monitor methodology. We believe that the revisions put forward within this Proposal would align the derivation of the GBA trigger with the revised Safety Monitor methodology.

#### **Nature of the Proposal**

This Modification Proposal seeks to:-

- 1. For the purposes of calculating the GBA trigger;
  - Use the new aggregated Safety Monitor deliverability figures as part of the GBA calculation.
  - Revise the GBA storage Deliverability amount to one component which
    is based on an aggregate of the Two Day Ahead Minimum Storage
    Deliverability Amount as defined in UNC for all storage sites, capable of
    providing such deliverability, rather than by individual Storage Facility
    Types.

#### 2. Safety Monitor

• Move to a single, aggregated Safety Monitor (of all Storage Facility Types) with two or more days of deliverability.

This Proposal, if implemented, will revise the GBA calculation within TPD Section V 5.9.6 and the Safety Monitor calculation defined within the TPD Section Q.5.1.1 (f); such that all storage sites with 2 or more days of deliverability are included in the GBA trigger rather than being categorised as separate Storage Facility Types e.g. Long Range (LRS), Medium Range (MRS) and Short Range (SRS).

We believe that this change may improve the clarity and operation of the GBA and thus may provide the market with an improved opportunity to understand and respond to potential supply/demand issues.

For clarity, we have provided an example with this Proposal that outlines the prevailing and proposed GBA arrangements (please see Appendix A).

#### Version 2.0 (varied) 14.07.2009:

After careful consideration of comments recently received, National Grid NTS has agreed to amend the suggested legal text. National Grid NTS believes that the amendments are non-material and do not change the intent nor the purpose of this Proposal. We do however believe that the suggested legal text amendments would provide greater clarity to the market.

Please note that the proposed change in UNC Section Q.5.2.7 (a) i.e. from weekly to daily reporting; National Grid NTS already publishes this information on a daily basis; this change is aligning the UNC to the operational activity.

#### **Suggested Text**

### UNIFORM NETWORK CODE – TRANSPORTATION PRINCIPAL DOCUMENT

#### **SECTION Q - EMERGENCIES**

Amend paragraphs 5.1 and 5.2 to read as follows:

#### "5 SAFETY MONITOR AND FIRM GAS MONITOR

#### 5.1 Introduction

- 5.1.1 For the purposes of paragraph 5:
  - (a) "Annual Firm Severe Demand" means that element of the 1-in-50 Severe Annual Demand which is attributable to all Firm Supply Points;
  - (b) "Annual NDM/Priority Severe Demand" means the element of the 1-in-50 Severe Annual Demand which is attributable to those Supply Points identified in the National Grid Safety Case as being 'protected by monitor';
  - (c) **"Firm Gas Monitor"** means, for each day of the Winter Period and <u>all each</u> Storage Facility Types, that portion of the Stored Firm Gas Requirement allocated in aggregate to <u>all</u> that Storage Facility Types by National Grid NTS;
  - (d) "Peak Firm Demand" means the peak day demand at Firm Supply Points;
  - (e) "Peak NDM/Priority Demand" means the peak day demand at those Supply Points identified in the National Grid Safety Case as being 'protected by monitor';
  - (f) "Safety Monitor" means, for each day of the Winter Period and <u>all</u> each Storage Facility Types, that portion of the Stored Safety Gas Requirement allocated in aggregate to <u>all</u> that Storage Facility Types in accordance with the principles set out in the National Grid Safety Case, together with an amount of gas for <u>all</u> each Storage Facility Types to permit the safe shutdown of those Supply Points not identified in the National Grid Safety Case as being 'protected by monitor';
  - (g) "Storage Facility Type" means one of the types (as determined by National Grid NTS from time to time and notified to Users pursuant to paragraph 5.2.1(f)) of Storage Facility or (where the context requires) all Storage Facilities of such a type;
  - (h) "Storage Firm Deliverability Requirement" means the amount by which the Peak Firm Demand exceeds the maximum daily

supply;

- (i) "Storage Safety Deliverability Requirement" means the amount by which the Peak NDM/Priority Severe Demand exceeds the maximum daily supply;
- (j) "Stored Firm Gas Requirement" means the amount (in kWh) by which the Annual Firm Severe Demand exceeds the maximum daily supply;
- (k) "Stored Safety Gas Requirement" means the amount (in kWh) by which the Annual NDM/Priority Demand exceeds the level of demand equal to the maximum daily supply; and
- (l) "National Grid Safety Case" means the safety case (in accordance with Regulation 2(5)) of National Grid NTS acting in its capacity as a gas transporter in relation to the NTS.

#### **5.2** Information Requirements

- 5.2.1 National Grid NTS will by 31 May in each Gas Year, notify Users of preliminary details of the following in respect of the coming Winter Period:
  - (a) Stored Safety Gas Requirement;
  - (b) Storage Safety Deliverability Requirement;
  - (c) Stored Firm Gas Requirement;
  - (d) Storage Firm Deliverability Requirement;
  - (e) maximum daily supply; and
  - (f) the number and designation of Storage Facility Types, together with the classification criteria used in the determination of those Storage Facility Types and (where the classification criteria has changed from that used in respect of the previous Winter Period) details of any change to such classification criteria.
- 5.2.2 National Grid NTS will, by 31 May in each Gas Year, determine whether the available Storage Space and/or Storage Deliverability is in aggregate less than the quantities detailed in paragraph 5.2.1(a) to (d) and shall notify Users of any shortfall and the extent thereof. In this event, the Safety Monitor and the Firm Gas Monitor notified pursuant to paragraph 5.2.3 will reflect the available Storage Space and/or Storage Deliverability.
- 5.2.3 National Grid NTS will, by 1 October in each Gas Year, notify Users of final details of the items stated in paragraph 5.2.1 along with the Safety Monitor and the Firm Gas Monitor for each day of the coming Winter Period in respect of each Storage Facility Type.
- 5.2.4 Calculations of available Storage Space and/or Storage Deliverability made pursuant to this paragraph 5 shall exclude:
  - (a) Storage Capacity booked by National Grid for Operating Margins Purposes; and
  - (b) Storage Capacity in respect of Storage Facilities where there are

- relevant operational and/or physical characteristics that would make use of their Storage Capacity and/or gas-in-storage inappropriate in the calculation of any of the information specified in paragraphs 5.2.1, 5.2.2 and/or 5.2.3.
- 5.2.5 National Grid NTS will throughout the Winter Period keep under review the information previously notified pursuant to paragraphs 5.2.1, 5.2.2 and/or 5.2.3, together with any information available to National Grid NTS in respect of its estimates of expected deliveries to or offtakes from the Total System, and may:
  - (a)reallocate the Safety Monitor and/or the Firm Gas Monitor between Storage Facility Types in order to enhance the security provided by current storage stocks;
  - (b)(a) reduce a Safety Monitor and/or a Firm Gas Monitor to reflect longer-term demand forecasts (for example, during the later Days of the Winter Period);
  - (e)(b) adjust a Safety Monitor and/or a Firm Gas Monitor to reflect the occurrence of severe weather; and
  - (d)(c) increase or reduce (as the case may be) a Safety Monitor and/or a Firm Gas Monitor to reflect any material change in National Grid NTS's estimates of expected deliveries to or offtakes from the Total System.
- 5.2.6 Where National Grid NTS undertakes any of the actions specified in paragraph 5.2.5, National Grid NTS will;
  - (a) in respect of any of the actions specified in paragraphs 5.2.5(a) to 5.2.5(eb), notify Users of any material changes in the information previously notified pursuant to paragraphs 5.2.1, 5.2.2 and/or 5.2.3; and
  - (b) in respect of any of the actions specified in paragraph  $5.2.5(\underline{dc})$ , notify Users of the reasons for such action being taken.
- 5.2.7 National Grid NTS will:
  - (a) notify Users, on a <u>daily weekly</u> basis, of the aggregate physical gasin-storage level (in kWh) in each Storage Facility Type; and
  - (b) where National Grid NTS calculates that the aggregate physical gasin-storage level in all Storage Facility Types exceeds the Safety Monitor for that Storage Facility Type by a quantity (in kWh) equal to or less than the Two Day Ahead Minimum Storage Deliverability Amount amount of gas that could be withdrawn from the Storage Facility Type in two (2) Days at the maximum withdrawal rate applicable to that Storage Facility Type, notify Users of:
    - (i) the quantity (in kWh) by which the physical gas-in-storage levels of <u>all\_that\_</u> Storage Facility Types exceeds the Safety Monitor for that Storage Facility Type; and
    - (ii) the sum of all Storage Withdrawal Nominations for all Storage Facilities of that Storage Facility Types.

- These physical gas-in-storage levels and the maximum withdrawal rate may reflect gas-in-storage and other information provided by the relevant Storage Operator(s), as well as Input and Output Nominations.
- 5.2.8 National Grid NTS shall notify all Users of potential or actual breaches of either a Safety Monitor or a Firm Gas Monitor as a result of:
  - (a) insufficient bookings of Storage Space and/or Storage Deliverability as notified to National Grid NTS by the relevant Storage Operator(s);
  - (b) anticipated shortfall of gas-in-storage based upon current stock levels and the injection and withdrawal information notified to National Grid NTS by the relevant Storage Operator(s);
  - (c) Renominations or other relevant within day information."

### UNIFORM NETWORK CODE – TRANSPORTATION PRINCIPAL DOCUMENT

#### **SECTION V - GENERAL**

Amend paragraph 5.9 to read 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 National Grid NTS shall issue (by means of publication on its website) an alert (a "Gas Balancing Alert") 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 greater than or equal to the Forecast Total System Supply for such Gas Flow Day.
- 5.9.4 National Grid NTS may issue (by means of publication on its website) a Gas Balancing Alert where during a Gas Flow Day, an incident is notified to National Grid NTS that would (in the reasonable opinion of National Grid NTS) reduce the Forecast Total System Supply for that Gas Flow Day by at least twenty five (25) MCM per Day and the remaining Forecast Total System Supply for that Gas Flow Day is less than or equal to the Forecast Total System Demand.
- 5.9.5 Where a Gas Balancing Alert is issued, it shall remain in force until the end of the Gas Flow Day to which it applies.
- 5.9.6 For the purposes of the Code:
  - (a) **"Forecast Total System Supply"** means the anticipated maximum daily supply to the Total System for the Gas Flow Day in question plus the sum of the quantity of gas that could be withdrawn <u>in</u> aggregate from relevant each Storage Facilityies Type and delivered

to the Total System on such Gas Flow Day without breaching the relevant Two Day Ahead Minimum Storage Deliverability Amount Monitor Level; and

(b) "Two Day Ahead Minimum Storage Deliverability Amount Monitor Level" means in respect of a Storage Facility Type, a quantity of gas from equal to the Safety Monitor for all that Storage Facility Types plus the quantity of gas that could be withdrawn from all relevant that Storage Facility Types in two (2) Days at their respective maximum withdrawal rates applicable to that Storage Facility Type.

For the purposes of this paragraph a Storage Facility will be a "relevant" Storage Facility if it is a Storage Facility whose deliverability and/or storage space National Grid NTS has used in the calculation of the Safety Monitor."

#### 2 User Pays

a) Classification of the Proposal as User Pays or not and justification for classification

It is not believed that this Proposal falls within the remit of a User Pays Modification. Therefore no justification has been provided.

b) Identification of Users, proposed split of the recovery between Gas Transporters and Users for User Pays costs and justification

N/A

c) Proposed charge(s) for application of Users Pays charges to Shippers

N/A

d) Proposed charge for inclusion in ACS – to be completed upon receipt of cost estimate from xoserve

N/A

Extent to which implementation of the proposed modification would better facilitate the relevant objectives

Standard Special Condition A11.1 (a): the efficient and economic operation of the pipe-line system to which this licence relates;

It is considered that revising and aligning the GBA trigger and Safety Monitor calculations, such that they reflect the revisions to the Safety Monitor methodology, will provide a more accurate representation of the Total System status. Implementation would provide greater clarity of the remaining storage position and hence increased transparency of supply/demand assumptions, and storage stocks throughout the year. As both Users and the system operator. will receive better information, this may facilitate improvements in the system operator's decision making processes associated with any market responses

that might alleviate any risk associated with a Gas Deficit Emergency.

This would be consistent with the achievement of this relevant objective.

Standard Special Condition A11.1 (b): so far as is consistent with subparagraph (a), the 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;

Implementation would not be expected to better facilitate this relevant objective.

Standard Special Condition A11.1 (c): so far as is consistent with subparagraphs (a) and (b), the efficient discharge of the licensee's obligations under this licence;

Implementation would not be expected to better facilitate this relevant objective.

Standard Special Condition A11.1 (d): so far as is consistent with subparagraphs (a) to (c) the 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;

Aligning the GBA trigger and Safety Monitor calculations with the revised Safety Monitor methodology would provide greater clarity and consistency. This may assist Users in their decision making when determining whether to place supply side-offers or demand-side response on to the market.

Also improvements in the method of calculating the GBA trigger and Safety Monitor may reduce the potential for responses resulting from a GBA being called unnecessarily.

Both these outcomes would be consistent with the achievement of this relevant objective.

Standard Special Condition A11.1 (e): so far as is consistent with subparagraphs (a) to (d), the 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;

Implementation would not be expected to better facilitate this relevant objective.

Standard Special Condition A11.1 (f): so far as is consistent with subparagraphs (a) to (e), the promotion of efficiency in the implementation and administration of the network code and/or the uniform network code;

Implementation would not be expected to better facilitate this relevant objective.

The implications of implementing the Modification Proposal on security of supply, operation of the Total System and industry fragmentation

Aligning the derivation of the GBA trigger and the Safety Monitor with the revised Safety Monitor methodology may provide a more reflective status of the system during a day with an increased Supply/Demand margin. These proposed revisions to the GBA trigger and the Safety Monitor should provide the market with improved indicators and also National Grid NTS as it responds and manages the safe operation of the system.

- The implications for Transporters and each Transporter of implementing the Modification Proposal, including:
  - a) Implications for operation of the System:

It is anticipated that this change will provide greater clarity in respect of operational decision making.

b) Development and capital cost and operating cost implications:

No such costs are anticipated.

c) Extent to which it is appropriate to recover the costs, and proposal for the most appropriate way to recover the costs:

N/A

d) Analysis of the consequences (if any) this proposal would have on price regulation:

N/A

The consequence of implementing the Modification Proposal on the level of contractual risk of each Transporter under the Code as modified by the Modification Proposal

No such consequences are anticipated.

The high level indication of the areas of the UK Link System likely to be affected, together with the development implications and other implications for the UK Link Systems and related computer systems of each Transporter and Users

No such implications are anticipated.

8 The implications of implementing the Modification Proposal for Users, including administrative and operational costs and level of contractual risk

### Administrative and operational implications (including impact upon manual processes and procedures)

Users may choose, or be required, to amend processes and procedures that are associated with their decision making and response to a GBA. However, this would reflect the improvement in available information and might result in a reduction in instances of unnecessary responses from Users

#### Development and capital cost and operating cost implications

There may be some financial benefits resulting from greater clarity in operational decision making.

#### Consequence for the level of contractual risk of Users

No such consequences have been identified.

## 9 The implications of implementing the Modification Proposal for Terminal Operators, Consumers, Connected System Operators, Suppliers, producers and, any Non Code Party

By improving the transparency of the supply/demand position and storage stocks, implementation would be expected to provide operational benefits for producers and terminal operators.

## 10 Consequences on the legislative and regulatory obligations and contractual relationships of each Transporter and each User and Non Code Party of implementing the Modification Proposal

No such consequences are anticipated.

## Analysis of any advantages or disadvantages of implementation of the Modification Proposal

#### **Advantages**

The following advantages have been identified:

- Provides greater clarity for market participants and operational decision making;
- Provides greater clarity of the remaining storage position; and
- Increases the transparency of supply/demand assumptions.

#### **Disadvantages**

None identified.

## Summary of representations received (to the extent that the import of those representations are not reflected elsewhere in the Modification Report)

Written Representations are now sought in respect of this Draft Report.

## The extent to which the implementation is required to enable each Transporter to facilitate compliance with safety or other legislation

Implementation is not required to enable each Transporter to facilitate compliance with safety or other legislation.

The extent to which the implementation is required having regard to any proposed change in the methodology established under paragraph 5 of Condition A4 or the statement furnished by each Transporter under paragraph 1 of Condition 4 of the Transporter's Licence

Implementation is not required having regard to any proposed change in the methodology established under paragraph 5 of Condition A4 or the statement furnished by each Transporter under paragraph 1 of Condition 4 of the Transporter's Licence.

## Programme for works required as a consequence of implementing the Modification Proposal

No programme for works would be required as a consequence of implementing the Modification Proposal.

Proposed implementation timetable (including timetable for any necessary information systems changes and detailing any potentially retrospective impacts)

It is recommended that this Proposal be implemented by October 2009 in line with the implementation of the revised derivation of the Safety Monitor and in readiness for the Winter 2009/10.

17 Implications of implementing this Modification Proposal upon existing Code Standards of Service

No implications of implementing this Modification Proposal upon existing Code Standards of Service have been identified.

Recommendation regarding implementation of this Modification Proposal and the number of votes of the Modification Panel

#### 19 Transporter's Proposal

This Modification Report contains the Transporter's proposal to modify the Code and the Transporter now seeks direction from the Gas and Electricity Markets Authority in accordance with this report.

20 Text

Representations are now sought in respect of this Draft Report and prior to the Transporters finalising the Report.

For and on behalf of the Relevant Gas Transporters:

**Tim Davis** 

**Chief Executive, Joint Office of Gas Transporters**