# Modification Report
# Facilitating further demand-side response in the event that a Gas Balancing Alert is triggered
# Modification Reference Number 0061

Version 3.0

This Modification Report is made pursuant to Rule 10 of the Modification Rules and follows the format required under Rule 9.6.

**Circumstances Making this Modification Proposal Urgent:**

In accordance with Rule 10.1.2 Ofgem has agreed that this Modification Proposal should be treated as Urgent because this Proposal accorded with the "guidelines for granting urgency status to a modification proposal." In particular, Ofgem noted that the objective of these Proposals (ie this Proposal and Proposal 0062 "Introduction of a Gas Balancing Alert") was to "further ensure that efficient and economic balancing actions might be considered, following the triggering of a proposed *Gas Balancing Alert*, prior to, and potentially avoiding or mitigating, a Network Gas Supply Emergency." Further, Ofgem considered that if the Proposals "were treated as non-urgent, they would not be in a position to be decided upon and, if appropriate, implemented ahead of the high demand period for this 2005/06 winter."

**Procedures Followed:**

The procedures agreed with Ofgem for this Proposal are:

| | |
|---|---|
| Sent to Ofgem requesting Urgency | 01/11/2005 |
| Ofgem grant Urgent status | 02/11/2005 |
| Transmission Workstream discussion | 03/11/2005 |
| Proposal issued for consultation | 07/11/2005 |
| Closeout for representations | 21/11/2005 |
| FMRs issued by Joint Office | 24/11/2005 |
| Modification Panel Recommendation | 01/12/2005 |
| Ofgem decision expected week commencing | 05/12/2005 |

## 1. The Modification Proposal

The Proposal was as follows:

**"Summary of key elements of the Proposal:**

- Gas Balancing Alert: This proposal seeks to define a GBA and the ability for National Grid NTS to inform Users of such a GBA. This proposal would trigger a GBA, when on D-1; the demand forecast is greater than, or equal to, the anticipated available supplies (as adjusted to take account of the proximity of available stored gas to the relevant *Safety Monitor).

***and, subsequent to a GBA being triggered and notified to the market:***

- Facilitating further Demand side offers - National Grid NTS shall be able to take Eligible Balancing Actions utilising not only the OCM but also “over the counter (OTC)” contracts where National Grid NTS considers it to be economic and efficient to do so. These OTC contracts will be only be facilitated with those Users who are not Trading Participants i.e. this will mean they are not registered participants of the OCM.

- National Grid NTS shall be able to take Eligible Balancing Actions for a specific Gas Day and, any bid/offers that might be placed by a market participant for a number of multiple (consecutive) days following that specific Gas Day for which the action is being taken up to, and including, seven consecutive days.
- The derivation of *System Average Price (SAP), whilst continuing to include all trades that are undertaken on the OCM (except those relating to Locational actions) for a given Gas Day, shall also include those Eligible Balancing Actions undertaken by National Grid NTS through the utilisation of OTC contracts.
- In addition, the *System Marginal Buy Price (SMBP) and *System Marginal Sell Price (SMSP) will be set by Eligible Balancing Actions taken in either the OCM or the OTC, including trades taken for more than one Gas Day.

National Grid NTS has, in conjunction with other interested industry parties, participated in the Ofgem chaired Demand Side Working Group (DSWG), which was initiated during 2004. The view of National Grid NTS is that the primary objective of the DSWG was to assess how demand-side response could be further facilitated, utilising existing market mechanisms, in the event of an impending NGSE.

Recently, the Winter (2005-2006) Outlook Report published by National Grid NTS has highlighted the importance of demand side response in maintaining the balance of the *Total System during periods of high demand.

Through the discussions within the DSWG, the industry has expressed the view that in order to facilitate the maximum opportunity for demand-side response offers (turn-down) to be made available to the National Grid NTS, in its role as the residual system balancer of the Total System, it should have the ability to accept and place bids/offers through OTC contracts and be able to accept multi-day offers through either the OCM or OTC contracts. The rationale is that by permitting National Grid NTS to undertake *Eligible Balancing Actions for multiple days and through OTC contracts, this might lead to more efficient and economic actions with the system clearing prices becoming more reflective of system requirements and other gas traded markets.

National Grid NTS believes that the consensus of the DSWG discussions is that by enabling the residual system balancer to source Eligible Balancing Actions through contracts in addition to the OCM, this might mitigate the risk of, and thus assist the market from entering into an NGSE. It should however, be noted that under this Proposal, National Grid NTS would only be permitted to trade through OTC contracts and take multi-day bids/offers when a potential supply-demand deficit has been identified i.e. a GBA has been triggered and notified to Users.

National Grid NTS believes that a full review of the System Operator balancing role should be undertaken in the fullness of time but for this Winter, the potential for this limited extension to the activities of the residual balancer should be assessed against the relevant objectives set out in Standard Special Condition A11 of the Gas Transporter Licence.

**Key Elements of the Proposal**:

 

## 1. Introduction of a Gas Balancing Alert

National Grid NTS will issue a GBA during D-1 when the System demand forecasted at 14:00 hours or 02.00 hours for Gas Day D, that identifies *Forecast Total System Demand is greater than or equal to the anticipated available supplies. The anticipated available supplies shall be adjusted to remove the contribution from the various types of storage as the storage stock levels reduce to within two days (at maximum withdrawal rates) of the applicable Safety Monitor for each *Storage Facility Type. Once issued, the GBA would remain in place for the duration of the Gas Day regardless of any subsequent notification of available supplies or change in forecasted demands.

There is an additional option that National Grid NTS believes could be considered during the consultation period for this Proposal. This option that might provide for a GBA to be triggered 'within-day' if;

a. there is an incident or an event notified to National Grid NTS that in its reasonable opinion, was anticipated to result in an end-of-day loss of available supplies of 25 mcm or greater and;

b. this end-of-day loss subsequently results in the remaining anticipated available supplies being less than, or equal to, the Forecast Total System Demand.

This option might be included in the implementation of this Proposal and to this end, National Grid NTS would seek to discuss the option in a UNC Transmission Workstream during the consultation period.

*The SME has contacted the Proposer to obtain clarity regarding its intention to include or remove the Within-day GBA option from this Modification. The Proposer has confirmed that, as:*

- *the majority of Respondents to Modification Proposal 0062 have indicated a preference either for or against the Within-Day GBA*
- *the majority of those indicating a preference have provided support; and*
- *the definitions of the GBA within modification Proposals 0061 and 0062 are identical,*

*National Grid NTS has, therefore, included this option within the Legal Text for this Proposal.*

## 2. Enable National Grid NTS to undertake non-OCM Eligible Balancing Actions

Once Users have been notified that a GBA has been triggered, in addition to the OCM, and where it is considered economic and efficient to do so, National Grid NTS shall be able to take Eligible Balancing Actions utilising "over the counter" (OTC) contracts. Any OTC (bilateral) trades conducted by National Grid NTS in this event would be classified as an Eligible Balancing Action and therefore, included in the derivation of SAP, SMBP, SMSP and *Balancing Neutrality Charges.

National Grid NTS will utilise the *Energy Balancing Invoice to pay Users for any OTC bilateral trade that it has bought or sold. Any broker fees and transaction charges for these non-OCM trades will be treated on the same basis as those incurred on the OCM. Any differences in settlement periods between the existing OCM/EBI arrangements and potential new OTC contracts might result in an interest payment charge being incurred by the Balancing Neutrality account.

Where it is considered by National Grid NTS to be economic and efficient to do so, it will take Eligible Balancing Actions through OTC contracts with those Users who are not Trading Participants i.e. this will mean they are not registered participants of the OCM. The generic contractual terms for such OTC contracts will be published and made publicly available by National Grid NTS on its website. Post GBA notification, those Users that wish to conduct OTC trades with the residual system balancer, will be deemed to have accepted those published contractual terms and conditions.

### 3. Enable National Grid NTS to accept multiple-day offers on the OCM and/or OTC as an Eligible Balancing Action(s) for a Gas Day and subsequent Gas Days

Once Users have been notified that a GBA has been triggered, and where it is considered to be economic and efficient to do so, National Grid NTS shall be able to take an Eligible Balancing Action for a specific Gas Day, including the consideration of 'multi-day' bids/offers that have been placed by participants on the OCM and/or OTC. For example, where that includes bid/offers that are placed for a number of consecutive days adjacent to the Gas Day that is being assessed and, where the action is being taken as the first of the multi-day bid/offer. However, it should be noted that any such multi-day bids /offers should be for consecutive days but, due to the Financial Services Market Act, this would be restricted up to a maximum of seven consecutive days.

Where a multi-day trade is accepted by National Grid NTS, for each component Day of the multi-day trade, the traded volume and price might contribute to the derivation of SAP and Balancing Neutrality for the Day relevant to that component. The effect on the derivation of SMPB and SMPS is described in the following section.

### 4. Change the derivation of SAP, SMSP and SMBP

Once the Users have been notified that a GBA has been triggered, in addition to the OCM, and where it is considered economic and efficient to do so, National Grid NTS shall be able to take Eligible Balancing Actions utilising OTC contracts.

Any OTC trades that are accepted by National Grid NTS will be treated the same as OCM Market Balancing Actions i.e. classified as an Eligible Balancing Action and as such, will be included in the calculation of SAP, SMBP and SMSP (where appropriate) and Balancing Neutrality Charges.

In determining what proportion of a multi-day trade (price and cost) should contribute into SAP, SMP and Balancing Neutrality for each of the Days associated with the multi-day trade, National Grid NTS will use its reasonable endeavours to determine the probability of demand exceeding supply based on available notified supply/demand data and forecast weather data it has at that time. This probability will then be used to determine the SMPB (assuming 'buy' trades only), the volume and price to be used in the calculation of SAP and Balancing Neutrality charges.

 

National Grid NTS is not proposing to use the 'buy' trade price in the calculation of the SMP **Sell** Price, even if that 'buy' trade price is the lowest on that day.

**<u>Please note:</u>** the formula will be applied separately to each multi-day trade since the volume and number of days and / or timing will be different for each multi-day trade. The probability could therefore be different for each multi-day trade taken on and for the same Gas Day. If multi-day trades are taken in future days, within an existing accepted multi-day trade period then a new probability will be calculated for the second set of multi day trades and used in the calculations for the second set of multi-day trades.

The calculations in the examples (below) are based on the following formula:

% of price applied = (Probability of requirement / Sum of all Probability of requirements)

Effective Price (Used in SMPB) = % of price applied * (p/kWh * Number of days trade applies for)

**Examples:**

National Grid NTS accepts a six day, multi-day offer (buy) for 200 kWh per day at 10p kWh per day, Total Cost = 12000p.

**Example 1**

| | **D1** | **D2** | **D3** | **D4** | **D5** | **D6** |
|---|---|---|---|---|---|---|
| Probability of Requirement | 100% | 20% | 5% | 0% | 0% | 0% |
| % of price applied | 80% | 16% | 4% | 0 | 0 | 0 |
| Effective Price (used in greater of SMPB calculation) | 48p | 10p | 2p | 0 | 0 | 0 |
| Effective Volume (used in SAP, volume defined in this row * original trade price (10p) | 960 kWh | 192 kWh | 48 kWh | 0 | 0 | 0 |
| Balancing Neutrality Charge | 9600p | 1920p | 480p | 0 | 0 | 0 |

**Example 2**

| | **D1** | **D2** | **D3** | **D4** | **D5** | **D6** |
|---|---|---|---|---|---|---|
| Probability of Requirement | 100% | 100% | 50% | 10% | 0% | 0% |
| % of price applied | 38.46 % | 38.46 % | 19.23 % | 3.84% | 0 | 0 |
| Effective Price (used in greater of SMPB calculation) | 23p | 23p | 12p | 2p | 0 | 0 |
| Effective Volume (used in SAP, volume defined in this row * original trade price (10p) | 462 kWh | 462 kWh | 231 kWh | 46 kWh | 0 | 0 |
| Balancing Neutrality Charge | 4615p | 4615p | 2308p | 461p | 0 | 0 |
| **Second GBA multi-day trade 2 taken for 3 days 500 units per day, 10p per day. Effective on day 4** | | | | | | |
| Probability of Requirement | **NA** | **NA** | **NA** | 100% | 75 % | 25 % |

 

| | | | | | | |
|---|---|---|---|---|---|---|
| % of price applied | **NA** | **NA** | **NA** | 50% | 37.5% | 12.5% |
| Effective Price (used in greater of SMPB calculation) | **NA** | **NA** | **NA** | 15p | 11.25p | 3.75p |
| Effective Volume (used in SAP, volume defined in this row * original trade price (10p) | **NA** | **NA** | **NA** | 750 kWh | 563 kWh | 188 kWh |
| Balancing Neutrality Charge | **NA** | **NA** | **NA** | 7500p | 5625p | 1875p |

**Advantages**

- SMPs, SAP and Balancing Neutrality apportionment is reflective of forecast requirements in future days; targeting costs and incentives appropriately.
- Based on latest information and a National Grid NTS forecast (NTS supply and demand).

**Disadvantages**

- All calculations are dependant upon a forecast that might not reflect the physical system and market conditions on that actual day."

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

The Proposer expressed its understanding "that the consensus of attendees of the DSWG considered that should this Proposal be implemented, it would further the relevant objectives as set out in the Gas Transporter Licence, Standard Special Condition A11.

1. In respect of paragraph 1.a):

a) The Proposal may improve *"the efficient and economic operation of the pipe-line system"* by facilitating co-operation between consumers and Users that might provide further demand-side response to the market at the time when the Total System most requires it.

b) The Proposal would ensure that National Grid NTS is able to utilise all available trading actions to minimise the risk of entering an NGSE.

c) The use and inclusion of OTC contracts in the derivation of SAP, and where relevant SMBP and SMSP, would further facilitate competition and reflect the value of all the gas that has been traded to meet residual balancing requirements during times of system stress; and

In its response NGNTS stated that:

d) *"In addition the proposed methodology for setting the effective price for a multi-day Eligible Balancing Action by assessing the probability of the Total System requiring the gas on subsequent Days ensures that the total cost of the trade is correctly targeted to the days when it is required."*

RWE pointed out however, *"consumers can already sell gas to shippers who can trade it on the OCM or use it to reduce their imbalance."*

2. In respect of paragraph 1.e):

a) The introduction of the Proposal might improve *"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"*.

b) The Proposal would increase the information available to industry parties thereby enabling a timely response to secure sufficient demand-side response in order to match supplies."

E.ON suggested, however, that implementation *"would likely conflict with the relevant licence obligation A11.1 (d) the securing of effective competition between relevant shippers and between relevant suppliers through creating an asymmetry of information, where some Users would know prices before others, potentially creating an unfair advantage for certain Users."*

MLCE expressed the view that implementation "*would encourage NGG to undertake more primary balancing actions. These primary balancing actions will not be as efficient as those undertaking by market participants because NGG does not have the same commercial drivers.*"

SGD expressed awareness of the discussions on the multi-day trade but was "*not convinced that this could not be done through an agreement with shippers, ie day one sold through GBA and an agreement on selling gas made between shipper and customer for the further 4 days. We consider that NG's intervention could be viewed as undermining effective competition between shippers and relevant suppliers. As such, this proposal undermines the Relevant Objectives."*

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

The Proposer believed "that the consensus of the attendees of the DSWG considered that Security of Supply would be enhanced by the implementation of this Proposal by:

- Encouraging demand-side response and providing signals to the market in advance (D-1) would allow consumers to prepare for, and plan, a reduction in their gas consumption on the Total System.
- In addition to undertaking Eligible Balancing Actions on the OCM, it would afford National Grid NTS with the ability to utilise OTC contracts.
- Multi-day bids/offers would provide Users and National Grid NTS with the ability to post and accept multi-day trades that might be considered economic and efficient."; and

In its response, NGTS stated that:

- *"The combination of accepting multi-day trades and OTC trades should afford all Users that want to participate in Eligible Balancing Actions with the residual balancer are able to do so."*

AEP whilst recognising that "*encouraging demand side response through any mechanism should enhance security of supply*" nevertheless questioned the "*materiality of possible offers, the information asymmetry that may emerge if OTC trades are undertaken, and the loss of real-time cashout information and* *absence of any insight into how NGG will judge various types of OCM trades against OTC offers.*" and concluded from this that the volume of gas offered would be insufficiently material to avert an emergency. AEP also referred to the "*numerous unresolved issues which could have a more significant detrimental impact on efficient market operation*".

BGT believed that "*the Modification addresses issues of supply security but the difficulties in operation mean that this would not be adequately met by this proposal.*"

In respect of utilisation of OTC contracts, the E.ON respondent referred to her participation in many DSWGs and that it was her "*understanding, which was shared with other shippers and customer representatives at a Transmission workstream, that no such industry view was formed. Whilst customers expressed an interest in the ability to offer multi-day trades, this was considered to be through the OCM. These discussions have resulted in APX enabling multi-day trades being made available in the locational market, with the potential to extend this further in the future."*

GDF referred to the "*tight supply/demand balance forecast for the UK this winter and also the increased dependence on non UKCS gas supplies in subsequent winters that every opportunity is given to the demand side to participate in the market and with assisting National Grid with its role as System balancer. A key element to facilitate continued efficient operation of the System and to aid security of supply is to encourage further market development for demand side participants.*" In reviewing the current process GDF pointed out that it did "*not allow for multi-day offers and as such precludes some participants from offering gas to the market.*" GDF expressed the opinion that *"the volumes that could be offered here from large end users are significant and could play a major part in preventing a potential or actual Gas Deficit Emergency*."

**4. The implications for Transporters and each Transporter of implementing the Modification Proposal, including**

**a) implications for operation of the System:**

The Proposer suggested that by "affording the opportunity to participate in OTC trading, and accepting multi-day trades it is anticipated that the residual system balancer will be able to maximise its commercial tools in an attempt to mitigate the risk of an NGSE being declared.

EDF questioned whether implementation would achieve its objective as the SO would accept "*OTC trades which are NBP (i.e. Title trades which do not require physical turndown).*" EDF pointed out that NGNTS "*has complained in the past that it finds Title trades are not efficient during tight system operations and that they prefer physical or Locational trades so it will be interesting to see what effect if any title trades will have to resolve a GBA. Also, there is no guarantee that the gas has actually been purchased for that site as nominations are only day ahead yet the site could have chosen to be off already for several days due to high prices or maintenance periods which NGG would not necessarily know about."*

The Proposer suggested that "National Grid NTS will be required to make changes to its System Management Principle Statement (SMPS) and

Procurement Guidelines in order to facilitate certain elements of this Proposal, for example, the introduction of the GBA and multi-day trades."

AEP expressed its disappointment that NGNTS "*has not indicated the changes that it would propose as this may influence opinions with regard to the modification. For example the recent SMPS consultation indicated that NGG would be more likely to take OCM trades with a physical or locational element when supplies are close to maximum which will give some degree of confidence of delivery. This also implies that it might take higher priced physical / locational trades ahead of title trades in such circumstances. OTC trades would be 'title' and hence would have nothing to favour them over an OCM title trade. Will the OTC terms and conditions link the trade to a specific location.*"

EDF pointed out that implementation of this proposal would "*require changes to NGG's SMPS procedures yet the industry has not seen a copy with this proposal upon which to comment.*"

RWE suggested that implementation might potentially reduce the certainty *"over whether gas is delivered, increased counterparty risk and complexity of interest payment relating to different settlement periods.*"

The Proposer expressed the belief that implementation of "this Proposal, as outlined, would not require a material change to its Safety Case" (Procedure for Network Gas Supply Emergency T/PM/E/1).

**b) development and capital cost and operating cost implications:**

The Proposer suggested that:

"a) National Grid NTS will be required to establish additional contracts, credit and off-line processes in order to manage OTC contracts and multi-day trades.

b) This Proposal will require xoserve to put additional processes in place to ensure timely and accurate billing/payment, credit/interest calculations and additional operational requirements.

c) National Grid NTS has already commenced improvements to its information provision web pages. The GBA will be included within this programme at no additional cost."

and in its response, NGTS stated that:

d) *"During Periods of high demand National Grid NTS may be required to redeploy staff from other activities in order to manage the OTC trades and carry out the processes resulting from OTC and multi-day Eligible Balancing Actions."*

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

The Proposer stated that

"a) Where National Grid NTS incurs costs, for example, changes to IT systems, recovery would be achieved through the appropriate SO incentive.

b) The introduction of multi-day trading on the OCM will require the Trading System Operator to implement IT system changes and modifications to the OCM Market Balancing Rules. It is anticipated that at the discretion of the Trading System Operator, any recovery of OCM-related system changes will be funded through trading charges on this market."

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

No such consequences have been identified.

**5. 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**

The Proposer did not believe that implementation of this Proposal would have any impact on the contractual risk between Transporters.

However, the Proposer suggested that there "might be additional contractual risk between National Grid NTS, acting as the residual system balancer, and those Users submitting OTC offers." and that;

There was a "potential risk to the cash flow of Balancing Neutrality as OTC trade counter-parties will be invoiced and settled at different times to the OCM/EBI." The Proposer anticipated that any costs resulting from the difference between OTC and EBI invoice settlement periods would be funded through Balancing Neutrality.

**6. 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**

The Proposer noted that "*Full implications of the Proposal are still being assessed, however National Grid NTS and xoserve will introduce manual process to support the implementation of this Proposal.*

*For a transitional period National Grid NTS has been advised by APX that it will not have the system functionality to correctly include OTC and multi-day trades in the published SAP and SMP prices on their system. It is intended that in the event of any Eligible Balancing Actions being taken which include OTC trades or multi-day trades, APX will flag that the SMP and SAP published on its systems may be misleading. As soon as practicable following any such Eligible Balancing Action National Grid NTS will publish sufficient detail on its systems to enable Users to calculate the prevailing SAP and SMP. Except in exceptional circumstances the prevailing SAP and SMP prices will be updated on National Grid NTS systems hourly as per current practice. APX have indicated to National Grid NTS that they intend to investigate the feasibility of an automated SAP and SMP price in the event that the Proposal is implemented. The proposed methodology for the apportionment of costs associated with multi-day trades, creates an increased risk that the prevailing cashout prices may exceed 99.9999 pence/kWh. This would exceed the maximum value that the Gemini system is currently able to process. The feasibility of a systemised solution to this issue or a manual work around is currently being assessed. However, whilst the risk is increased it remains low, for example the current SMP buy price is below 2.5p/kWh – some forty times below the current Gemini maximum value."*

EDF understood that APX had "*been making major changes to allow the effects of this modification to proceed and agree with these changes in principal, but we question how changes can be made to Shippers trading systems when the modification proposal has not finished its due course?*"

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

The Proposer suggested that:

- "The Proposal, if implemented, should assist the Users' processes, for accessing demand-side response and communicating with their customers in a more timely and efficient manner.
- Credit Risk; although this is unlikely to be a material change. For example, if a GBA is triggered for a Gas Day, it is likely that any Eligible Balancing Actions undertaken by National Grid NTS will be executed as acquiring trades actions rather than disposing trades.
- Any interest payments incurred because of any difference between OCM and OTC clearing/invoicing settlement periods will be funded through the Balancing Neutrality account."

In its response, NGTS suggested that:

- *"It is intended that any interest payments incurred because of any difference between OCM and OTC clearing/invoicing settlement periods will be funded through the Balancing Neutrality account.*
- *Lack of anonymity with OTC contracts means that the third party trading with the residual balancer will be aware of the potential affect on system clearing prices before other Users. This might lead to some Users in those markets effectively having an information advantage over other Users in that they might effectively have asymmetrical access to price data until the revised SAP and SMP prices are published to the market. As detailed above National Grid NTS intend to publish the effect of such trades on SAP and SMP prices within an hour of such trades being completed."*

EBCC members noted that "*if implemented, trades arising from this Proposal would count towards indebtedness, which may impact Credit Cover*"

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

NGTS commented: *"Through our discussions at the DSWG and elsewhere, we believe that there are a number of major gas consumers that would be willing to offer demand response to the residual balancer (via their shipper) when the Total System is "under stress". Some of these major gas consumers are unable to significantly reduce their gas demand for a single day and therefore require the residual balancer to commit to taking gas for a number of days. The Multiple Day element of the Proposal will enable these consumers to offer this potential demand response. Further we believe that there is a subset of major gas consumers that are unable to trade with the residual balancer via a shipper that is also an OCM member (Trading Participant). The OTC element of the Proposal* *will enable such non Trading Participants to trade with National Grid NTS in its role as the residual balancer."*

Corus expressed its understanding that "*the proposal to enable multi-days bids and OTC trades is designed to maximise the routes and methods to market for end users. Without their provision the existing framework could be deemed a barrier to firm load shedding.*"

## 9. 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 have been identified.

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

The Proposer identified advantages and disadvantages of implementation. These have been outlined below together with additional comments from the responses.

**"Advantages of the Proposal**

National Grid NTS believes that the consensus of the attendees of the DSWG considered the primary advantages of this Proposal as:

- It would provide a timely and important signal to the market that demand-side response is more likely to be required in order to maintain the balance of the Total System. If implemented the GBA would provide an additional trigger for Users and major gas consumers to initiate appropriate demand-side reductions.
- Provide National Grid NTS with the ability to consider other trading actions, which, it deems to be economic and efficient in order to mitigate the risk of an NGSE being declared.

  CIA welcomed the additional flexibility through the fact that NGNTS would "*be able to take multiple (consecutive) days following that specific Gas Day for which the action is being taken up to, and including, seven consecutive days.*" CIA further pointed out that the "*situation for this winter is tight and has not been experienced before and we welcome the work done in order to ensure that there are no barriers to providing demand side response.*"

  energywatch welcomed the initiative to seek balancing actions from non OCM users. It suggested that it was "*critical, given the information provided by National Grid in its recent Winter Outlook Report, highlighting the potential for tightness in gas supply this winter that such users are afforded the ability, out with their regular contracts with shippers, to contribute to relieving system stress without the enforced physical and financial penalty of interruption.*"

  In respect of the ability to consider multi day trading RWE believed the justification for this change was far from obvious. RWE pointed out that NGNTS "*argued at their recent Winter Outlook presentation that their demand forecasts were only reliable for a maximum of two days out. It seems inconsistent that they should be able to buy gas for up to seven days in the future."*

SGN noted that this Proposal sought to facilitate greater demand side response "*by opening up options to allow balancing actions to be taken for multiple days through the OTC. Whilst there is no information available on the extent to which additional response may be made available, in principle this seems appropriate.*"

STUK expressed the view that limiting the *"eligibility of Users who can trade OTC with National Grid Transmission will artificially restrict the offers that could be made available and limiting the opportunity to correct system shortfalls efficiently."*

- Could create additional price signals that might encourage Users to resolve their own supply-demand deficit prior to an NGSE being declared.

energywatch agreed that as a result of implementation there would be "*appropriate pricing signals to the market about the availability of gas and the requirements of the system which can be built into the costs of balancing. This should help ensure that efficient and economic actions are taken in the forward markets and in the balancing period by National Grid, keeping overall costs down for participants and ultimately to end consumers.*"

- Provides a facility for non Trading Participants to offer demand-side response to the residual system balancer during the period of a GBA.

CIA agreed that NBNTS "*should be able to take actions not only using the OCM but also 'over the counter (OTC)' contracts where National Grid NTS considers it to be economic and efficient to do so.*" CIA noted that NGNTS would "o*nly take OTC contracts with non-OCM participants who are Shippers.*"

Corus understood *"the proposal to enable multi-days bids and OTC trades is designed to maximise the routes and methods to market for end users."* It concluded that without "*their provision the existing framework could be deemed a barrier to firm load shedding.*"

SGN was "*not entirely clear why the option to facilities multiple day trades specifically excludes OCM participants. We understand that currently multiple day trading is not possible on the OCM. It would appear that whilst this could be resolved for next winter it is not possible to achieve in time for this winter. If this is the case, SGN wonders whether there would be merit in extending the multiple day trading option to OCM participants through the OTC.*"

- It would further facilitate competition in those gas markets associated to the pipeline system and appropriately reflect the value of gas that the residual system balancer had traded in other markets during times of system stress.

RWE pointed out that implementation would not "r*eflect the value of all gas traded to meet residual balancing actions as it inflates the Trade Value of gas paid on day 1*"

- The Proposal is restricted to the duration of a GBA and might therefore, be considered to have a negligible effect on the majority of Gas Days.

**Disadvantages of the Proposal**.

 

- Lack of anonymity with OTC contracts; by taking an Eligible Balancing Action in uncleared Markets this might have an impact on SAP and SMP as the Users making OTC offers will be aware that they are trading with National Grid NTS and thus, they might be aware of pending changes in system clearing prices before other Users. This might lead to some Users in those markets effectively having an information market advantage over other Users in that they might effectively have asymmetrical access to price data until the revised SAP and SMP prices are published to the market.

energywatch noted NGNTS' "*concerns about potential information asymmetry regarding pricing data and some issues regarding the timely availability of cash out prices. However, it may be possible to remedy this if, as we believe, the fundamentals behind proposal 0061 are developed into an enduring mechanism for the longer term.*"

STUK suggested that the *"lack of anonymity with OTC contracts may also have an impact on SAP and SMP as users making OTC offers will be aware that they are trading with National Grid Transmission and may be aware of changes in system clearing prices before other Users."*

- Additional complexity: Daily operation of the Network, associated commercial actions, processes and procedures to manage the OTC process. Invoicing and Settlement; additional processes and procedures to manage the billing payment of OTC trades and the credit management of the OTC trades.

AEP agreed with this statement and asked whether the additional operational procedures, training of staff and new settlement processes was justified given the materiality. It went on to suggest that as "*we are already in the winter period the introduction of new processes will, via lack of familiarity, introduce additional risk and stress for operational staff at GNCC at a time when attention should be focussed on the safe and efficient operation of the system in pre-emergency conditions.*"

EDF suggested that implementation would "*introduce a great deal of complexity which will now have to be managed by Users and Transporters requiring new operational procedures and training of staff at a time when the industry should be focusing on managing their portfolios and supplies for winter. Given that NGG has failed to state the materiality of their proposal we can not see that such a 'slap-dash' urgent modification is warranted this far into the winter period.*"

EBCC stated that its members were *"concerned that implementation could introduce significant additional complexity and difficulties for Users when identifying and monitoring associated invoices. Users are unlikely to be able to identify the associated trades, and hence be likely to inadvertently invoice National Grid NTS in the same way that invoices are raised for other trades. The complexity is particularly likely to create difficulties since any impact is likely to be rare, and those operating back office processes cannot be expected to be familiar with, and recognise, the impacts. It would be very helpful if National Grid could ensure that practical issues associated with* *implementation are fully taken into account, and that training and support is available both ahead of and when an incident occurs.*"

MLCE suggested that "*the complexity of the 'price focussing' methodology based on a probability of use will only further signal an uncertain price increase in the market where such a price bears no resemblance to the marginal cost of gas. There appears no possible way that NGG could meet its 'efficient and economic' test if it were to buy gas without having any reasonable prospect of using it for residual balancing purposes."* MLCE also pointed out that the *"nature of the proposal is overly complex and unsuitable for a market that relies on active trading to determine marginal prices. By encouraging NGG to transact in the OTC market without effective and objective tests and immediate price reporting, the proposal dismisses the role of the market in managing primary gas balancing. We are concerned that this type of activity is still viewed as residual balancing activity when it clearly is not."*

RWE believed that this *"increased complexity may lead to unintended consequences for instance if NG NTS buy OTC gas for seven days but the OCM is suspended due to occurrence of an emergency within this seven days. How can the Effective Price then feed into cash-out if the OCM is suspended?"*

SGD did "*not understand why this shipper cannot facilitate trades through the OCM rather than focus on introducing further complexity into what are already very complex arrangements for demand side participation and for emergency processes for this winter.*"

- In the event that a GBA is triggered and National Grid NTS takes non-OCM Eligible Balancing Actions, there will be a delay in the provision of cashout price information to the market. Currently, cashout prices (SAP & SMP) are published by APX on a near real-time basis as they are derived from those trades undertaken exclusively on the OCM. In this event, there will be times when the published OCM SAP (and SMP) will not reflect those actions undertaken by National Grid NTS though OTC contracts. National Grid NTS will endeavour to minimise any timing delay to the publication of SAP and SMP price information to the market.

AEP referred to this disadvantage stating that the time that a GBA has been issued "i*s the time that it is arguably most important that the market is aware of the prevailing cashout prices.*" AEP questioned what "*undertakings are NGG going to make concerning the delay in publication of real-time cashout prices, how will these prices be communicated?*"

APX stated that "*the Market must have visibility as to the TSO trades at the time of action. If National Grid was to trade OTC, it would not be visible to the Total Market. Real time information would need to be provided as to whom the trade was with and the price and volumes to avoid some parties gaining an unfair advantage over others.*" Referring to the timescales available to implement the "*revised pricing methodology",* APX suggested that this *"may lead to a less than satisfactory technical solution. Any delay in publishing reliable price information following a National Grid trade will add to uncertainty when the market is already in a state of flux.*"

BGT referred to the "*uncertainty about the manner in which Users will be aware of such trades being accepted and the consequent effect upon prices. It has been commented that there would be an inevitable delay in revising the current system prices to take account of such trades but to date we have not been made aware of how this information will be published and the scale of the delay. In the circumstances which would apply when this process would come into play, this information is critical to the effective operation of the market.*"

EDF referred to the nature of the proposed derivation of cash-out prices and suggested that it would "*delay the publication, and quality of, market reflective prices. This will only serve to produce inefficient and late market signals which could create a significant amount of confusion during a GBA, a time when market participants need clear and defined market signals."*

GDF whilst recognising that further supplies could be encouraged to market via OTC trading for non-OCM participants, and that this should be encouraged, stated that "*market information, particularly prices, should be clear especially when prices are likely to be both high and volatile in high demand days. System actions and resulting prices should be instantly visible to Users in such a scenario and our support for this proposal is qualified on this basis.*" GDF particularly pointed out that "*where system actions are taken via an OTC trade this information must be readily visible to Users and incorporated into System prices without delay. Systems and processes must be in place to ensure there is no degradation of information available to market participants."*

MLCE stated that the most "*significant problem from this proposal arises out of price reporting. By undertaking OTC actions most the market is not made aware of the cash out consequences for some time.*"

RWE expressed the view that the "*potential additional gas available OTC has never been quantified. Without this, it is unclear what this change is adding as non-OCM shippers can still sell gas to shippers at the beach or NBP without this modification. In addition, implementing this will introduce a number of inefficiencies into the market. These include less transparency in the trades themselves, giving the selling counter-party knowledge in advance of the rest of the market and delay production of SAP/SMP buy for the rest of the market."*

STUK referred to the *"need for OTC trades to be manually entered into systems will lead to delays in the publishing of SAP, introducing the possibility of errors being published and prices creating delays in market signals."*

TGP had *"strong reservations about the use of the OTC market despite it only being used during periods when a GBA is issued. We understand these offers will be treated as being equivalent to title trades and that a significant delay may exist between the acceptance of such offers and publication of its impact on cashout price. This lack of real-time cashout price information is a serious loss of transparency, may lead to significant information asymmetric between trading parties regarding expected cashout price* *movements during periods of system stress and ultimately may have a detrimental impact on market price formation/competition."*

- It should be noted that these disadvantages are dependent on the proportion of activity undertaken on the OTC rather than the OCM. National Grid NTS however believes that the value of the OTC should be relatively low given that a large number of Users are active participants within the OCM."

In its response NGNTS added the following:

- "*For a transitional period National Grid NTS has been advised by APX that it will not have the system functionality to correctly include OTC and multi-day trades in the published SAP and SMP prices on their system. It is intended that in the event of any Eligible Balancing Actions being taken which include OTC trades or multi-day trades, APX will flag that the SMP and SAP published on its systems may be misleading. As soon as practicable following any such Eligible Balancing Action National Grid NTS will publish sufficient detail on its systems to enable Users to calculate the prevailing SAP and SMP. The prevailing SAP and SMP prices will be updated on National Grid NTS systems hourly as per current practice. APX have indicated to National Grid NTS that they intend to investigate the feasibility of an automated SAP and SMP price in the event that the Proposal is implemented.*
- *The proposed methodology for the apportionment of costs associated with multi-day trades, creates an increased risk that the prevailing cash-out prices may exceed 99.9999 pence/kWh. This would exceed the maximum value that the Gemini system is currently able to process. The feasibility of a systemised solution to this issue or a manual work around is currently being assessed. However, whilst the risk is increased it remains low, for example the current SMP buy price is below 2.5p/kWh – some forty times below the maximum".*

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

Representations were received from the following:

| | | |
|---|---|---|
| Association of Electricity Producers | (AEP) | Not in support |
| APX Gas Limited | (APX) | Not in support |
| British Gas Trading Limited | (BGT) | Not in support |
| Chemical Industries Association Limited | (CIA) | Support |
| Corus | (Corus) | Qualified support |
| Energy Balancing Credit Committee | (EBCC) | Comments |
| energywatch | (energywatch) | Support |
| Edf Energy plc | (EDF) | Not in support |
| E.ON UK plc | (E.ON) | Not in support |
| ExxonMobil | (ExxonMobil) | Not in support |
| Gaz de France ESS (UK) Ltd | (GDF) | Qualified support |
| Merrill Lynch Commodities (Europe) Trading Ltd | (MLCE) | Not in support |
| National Grid NTS | (NGNTS) | Support |
| National Grid Gas plc (UK Distribution) | (NGUKD) | Not in support |
| RWE npower plc | (RWE) | Not in support |
| Scotia Gas Networks | (SGN) | Qualified support |
| Shell Gas Direct | (SGD) | Not in support |
| Statoil (UK) Limited | (STUK) | Not in support |
| Total Gas and Power Limited | (TGP) | Not in support |

**Materiality**

AEP believed that this "*key issue*" was not addressed in the justification. AEP pointed out the lack of detail such as the volume of gas supplied by non-trading participants and how much might be supplied in multi-day offers. AEP pointed out that materiality was important as there were "*a number of downsides to this modification and a balance needs to be sought between the consequential advantages and disadvantages.*" AEP also cited the principle used in the SMPS for accepting offers ie a discernible positive impact on supply/demand position and expressed the wish that this principle be retained. AEP expressed the wish that accepting offers for price setting purposes should not become acceptable as this would not be "*consistent with the principles of cost reflective cashout prices or economic and efficient operation of the system*" and expected that Users who are not trading participants would provide an indication of demand side response in their responses. AEP repeated these statements in the context of enhancement of competition.

APX did not *"believe that allowing National Grid NTS to trade OTC is consistent with previous industry thinking or evolution of the UK Gas Market. Although the modification is designed to only allow non OCM members to trade over the counter, we do not believe that any tangible benefit would be achieved. Almost all physical players that could make a difference in the event of a GBA are already OCM members.*"

EDF did not "*understand the materiality of the proposal and whether such a fundamental change to the way Shippers operate commercially in an emergency should be changed this close winter. We understand NGG has raised this urgent modification on behalf of end-users who have shipper's licences but are not OCM trading parties yet NGG has failed to state how many 'non-trading' parties wish to transact in this way or how much volume they can release to NGG . We particularly fail to see how NGG can not know how many 'non-trading' parties they wish to trade with when they state they will specifically select these shippers who are not OCM signatories to trade with in a GBA.*"

E.ON did not consider that "*this proposal is likely to materialise in any significant volume of gas, which would have a discernible positive impact on the supply/demand position of the system.*" E.ON also suggested that NGNTS "*has been unable to offer any data, which might indicate the expected volume associated with allowing NG NTS to accept offers OTC.*"

RWE suggested that *"if the level of the OTC trades should be low because most shippers are active participants on the OCM it begs the question as to why this modification is necessary."*

In SGD's view *"NG's proposal is not sufficiently transparent for respondents to be able to fully understand why it is proposing that non-OCM trading should be facilitated. We assume that any trades carried out by NG OTC with non-OCM shippers will be only with those who have also signed the UNC and have fulfilled credit requirements in keeping with NG's practices."* SGD stated that it was not *"clear who these non-OCM participants could be"*

**Market Dynamics**

AEP referred to the prospective changes to APX systems to allow multi day trades and pointed out also that following the issue of a GBA non-market participants would "*have a wider range of trading opportunities with NGG than trading participants.*" AEP also suggested that shippers who are trading participants might "*face greater restrictions in offtaking gas following a multi-day trade, particularly where the GBA does not persist for the duration of the trade.*" AEP acknowledged the view that provision of "*trading options outside the OCM could be considered to be an advantage and consistent with the economic and efficient operation of the system. But only if this does not lead to market distortion, as may be the case if real-time cashout information is not available to all parties. For example if an OTC trade sets a new SMPB price then the counterparty will have this information before other participants and could trade on the basis of this knowledge. In addition it is unclear as to when and how NGG will compare OTC and OCM offers with respect to price, duration, location etc.*" AEP acknowledged that implementation would only affect days where a GBA has been issued but pointed out that "*days of system stress are those that the market must function most efficiently and any information asymmetry will have a detrimental affect of this.*"

energywatch suggested that "*the very fact that additional balancing actions are available to National Grid should mitigate market risk and keep costs down.*"

ExxonMobil understood that this acceptance of OTC offers "*was designed to allow a route to market for end-users holding shippers licences and who may wish to sell gas to National Grid but who have not registered to trade on the*

*OCM."* It pointed out that such *"OTC trades would be used to set both SAP and SMPB with costs feeding through into Balancing Neutrality charges; the lack of transparency involved in such arrangements would represent a backward step for UK market operations and creates the possibility of discrimination within the shipper class of users.* ExxonMobil concluded that the *"number of participants able to take advantage of this proposal is very limited whilst market uncertainty, and therefore risk, is increased for the majority of the shipping community."*

MLCE were not "*entirely sure which companies NGG will undertake trades with on the OTC, as the limit to non-OCM parties seems arbitrary, possibly discriminatory and very likely to be in breach of normal market practice of taking the best price available. It will be difficult to assess whether NGG is taking offers in price order as it will have to determine which parties are non-OCM participants. Further, it is not clear whether there will be a prohibition on companies setting up as non-OCM shippers to take advantage of any arbitrage opportunities.*" MLCE further expressed the belief that "*the basic market concepts already exist to bring demand side players into the gas balancing equation. MLCE is concerned that these basic concepts would be distorted or abandoned by this modification as NGG will only undertake OTC trades with a limited number of market participants and price transparency will disappear at a time when it is most required. It is inconceivable that proposals should be introduced that will curtail trading activity during apparent times of system stress.*"

NGUKD stated that the "*benefits from ensuring that demand-side period-gas is available to the residual balancer would be disproportionately offset by the detrimental effect this gas could have on the cash-out price and the efficient workings of the neutrality arrangements.*" NGUKD pointed out that the "*quantity would be fairly low: but this, in itself, would not be a problem. The problem arises from the significant and disproportionate effect this gas could have on the cash-out arrangements.*"

SGD stated that it would "*be important for NG to demonstrate that it is not discriminating in favour of any group in introducing these changes."*

**Transporter Incentives**

EDF commented that NGNTS' *"incentives would need to be changed to include OTC trades. This will take several months and we question how this proposal could be implemented without effective and efficient NGG balancing incentives.*"

ExxonMobil referred to a comment made by the Proposer that the suggested SAP, SMPbuy and Balancing apportionment would be reflective of forecast requirements in future days: targeting costs and incentives appropriately. ExxonMobil commented, however, that it believed that "*costs and incentives are better determined by actual requirements rather than by forecast requirements and we do not think that NG NTS' incentives were designed to take into account multi-day trading, and may therefore need to be reviewed. The fact that NG remains neutral to any costs arising from these trades means that, if this Proposal is implemented, scrupulous auditing will be necessary to ensure that they do improve the efficient and economic operation of the pipeline system."*

RWE, after reviewing the drafting, were *"unclear how this modification fits in with the current NG NTS SO incentives and whether a change to their GT licence is required."*

STUK stated that whilst "*balancing incentives may be considered less important when considering balancing actions at times of system stress. It is unclear from the proposal how these trades will be dealt with in the balancing incentive scheme. The current incentives only recognise the current mechanisms, so no incentives will apply to the multi day trades, therefore National Grid Transmission will have no incentive to behave in an economic and efficient manner when accepting multi day trades on either the OTC or OCM.*"

TGUP stated that it was *"unclear how the current SO imbalance price incentive will operate alongside the proposed treatment of multi-day offers." TGP agreed "the ability to provide multi-day offers on the OCM provides advantages in potentially offering additional demand response, however, we consider the treatment of multi-day offers within cash-out price would greatly benefit from further discussion within the industry. This would ensure that the interactions between Transco's price incentive and the proposed methodology are better understood by all Network Code parties and hence the implications of the effect of this aspect of the proposal are also well understood."*

**Cash Out**

AEP referred to the manner in which NGNTS would determine the cash-out prices on the basis of forecasts and stated that "*the discretion afforded to NGG in these circumstances cold not ensure that costs were targeted appropriately. AEP also questioned "whether NGG discretion in setting SMPB is consistent with its incentives.*" AEP also put forward a scenario based on NGNTS' example 1 and asked whether NGNTS would take a "*45p single day locational gas on the OCM in advance of gas at 10p for six days OTC with a weighting that would given and SMPB of 48p? Or would the comparison be against the offer price of 10p?*"

APX pointed out that the "*OCM provides real time system prices to the market, based on completed trades on the EnEx platform, derived by rules that are easy to understand. The Modification proposals for the treatment of SAP/SMP prices are complex and involve probabilities, which would make it potentially difficult to understand the methodology behind the calculations, particularly the SMP Buy price.*" APX also noted that "*the proposed treatment of SAP/SMP prices delivers cash out prices up to 7 times the marginal trade, which could be seen to be penal to Shippers using their best endeavours to balance their portfolio, and ending up short through no fault of their own and being penalised heavily. The degree of potential over-recovery of balancing costs seems excessive, and risks damaging the financial integrity of a Shipper with an imbalance they cannot resolve.*"

BGT whilst recognising the desirability of note OCM parties to offer demand side response to the SO referred to a number of practicalities to be considered before this could be enabled. BGT went on to recognise the requirement to weight the "*cost of the response to the period of need*" It concluded that as *"this is likely to have an impact upon system cash-out prices over the period, we do* *not believe that this methodology can be implemented from a "quick-fix" remedy without proper consideration of the effects.*"

CIA noted "*that this proposal introduces additional complexity and may not be welcome by some participants. We are also aware that the methodology for how a multi-day trade feeds into cash-out is not ideal and that this may need to be reviewed again. However, given the time constraints for this winter we believe that this modification should be implemented in its current form.*"

Corus referred to the fact that the "*detail to this proposal has been added very late in the day and has benefited from little discussion. At this stage, end users must rely on NG NTS's confidence that it can make this aspect work.*"

EDF expressed difficulty in seeing "*how NGG will appropriately calculate effective cashout prices greater than day ahead, let alone 7 day's ahead, as the proposal suggests, when they claim they do not have efficient balancing data further than 1 or 2 days out.*"

E.ON suggested that "*the weighting of costs, as detailed in the proposal, could lead to a SMP Buy price which does not provide a true reflection of the market and Users, which may be short and do not have real time access to information may be hit by a penal cash-out price where they have been unable to or have not received the correct or timely signals to react sufficiently. The feed into balancing neutrality could then lead to inequitable windfall gains and losses.*"

ExxonMobil also stated that it did not fully understand how this was intended to work.In particular it was not clear to ExxonMobil how NGNTS "*can know in advance what actions it may or may not need to take to balance the system on any day other than the current gas day. The methodology proposed for determining the cost of a multi-day trade that will be used to allocate Balancing Neutrality Charges, as the Effective Price for SMPB calculation, and the Effective Volume for SAP is based on assumptions made by NG NTS as to the probability of requirement. We do not know how these assumptions are made and they seem to us to be entirely subjective. The fact that such a trade has been made could mean that SMPB is set days in advance of the actual Day and may not necessarily reflect market trading on that day or whether the system balancer was required to take a balancing action"*

NGUKD was concerned that, as the proposal stood, there would be "*considerable scope for the derived SMP, associated with this type of transaction, to give rise to price spikes. This is due to the associated SMP being directly proportional to the period over which the gas has been offered and, the "delivery-profile" of the gas, (over the period), being the product of assumptions.*" NGUKD believed, "*given that the derived SMP is the product of a deemed delivery profile rather than an actual transaction, the trade has the potential to affect market prices significantly and non-transparently, and therefore, inappropriately.*" NGUKD suggested that prices derived from OTC transaction should not set SMPbuy and suggested that "*the proposed method by which any gas purchased OTC would flow through into the SMP equation is flawed."*

RWE expressed the view that the proposed methodology was *"flawed and the formulation means that it will severely affect cash-out due to the multiplier effect of setting probabilities. Weighting protects NG NTS because assigning a* *probability allows them to sculpt the price based on the certainty of their demand forecast. This passes the risk onto shippers. Within the methodology there is no transparency over setting the probability and NG NTS has discretion over the level of cash-out for each day covered by the multiple day trade. This reduces the transparency over the trade setting SMP buy and is not reflective of actual utilisation of gas. It is unclear how, in practice, offers will be accepted. For instance, will the original price or the weighted price of a multiple-day offer be used. It is important that shippers understand this if they wish to re-price offer*s"

STUK suggested that *"by introducing further element to the calculation of cashout prices" it was "concerned that the calculation will become opaque and that prices will no longer be updated as quickly as they are on the OCM or may even be wrong."* STUK also referred to the fact that the Proposal described 'front loading' volumes for multi day trades, "*spreading volumes over the first few days of a period, regardless of the actual response required, and reducing the final few days of the traded period to zero.*" It was concerned that this would not be "*an appropriate treatment of a multi day trade. The weighting of the daily price is based around a forecast of utilisation by National Grid Transmission. It is not clear how accurate such forecasts will be and could lead to artificial System marginal prices being created which are not representative of the cost of balancing.*"

TGP suggested that the 'probability of requirement' within the cashout price calculation was *"highly arbitrary and the proposed methodology artificially inflates the price and volume delivered for balancing purposes. This treatment does not appear to be cost reflective and is unlikely, in our view, to facilitate economic or efficient operation of the system."*

**Effect on OCM and OCM Parties**

EDF suggested that the proposal "*discriminates against end-users who are 'trading parties' in the event of a Gas Balancing Alert (GBA) as they will not have greater opportunities to transact with NGG other than through the correct route of the OCM.*" In terms of the OCM itself, EDF suggested implementation would "*undermine the effectiveness and profitability of the OCM, a platform specifically designed so that Shippers can trade unilaterally with NGG.*"

**Legal Text**

AEP pointed out that the text seemed to *"contemplate multiday and OTC Market Balancing Sell actions whereas the intent of the proposal is to facilitate demand side response which will inevitably require Market Balancing Buy actions."*

AEP also identified an incorrect reference which has been corrected in the attached version of the text.

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

No such requirement has been identified.

**13. 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**

No such requirement has been identified.

**14. Programme for works required as a consequence of implementing the Modification Proposal**

The Proposer has identified that manual processes might be adopted initially and therefore it is anticipated that the programme for works required in order to implement this Proposal would be minor.

**15. Proposed implementation timetable (including timetable for any necessary information systems changes)**

The Proposer had suggested that this Proposal be implemented immediately.

**16. Implications of implementing this Modification Proposal upon existing Code Standards of Service**

No such implications have been identified.

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

At the Modification Panel Meeting held on 1 December 2005, of the 9 Voting Members present, capable of casting 10 votes, 2 votes were cast in favour of implementing this Modification Proposal. Therefore the Panel did not recommend implementation of this Proposal.

**18. Transporter's Proposal**

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

## 19. Text

### UNIFORM NETWORK CODE - TRANSPORTATION PRINCIPAL DOCUMENT

### SECTION D - OPERATIONAL BALANCING AND TRADING ARRANGEMENTS

*Amend paragraph 1.4.1(d) to read as follows:*

"(d) a "**Market Balancing Buy Action**" is the effecting of a ~~Market~~Balancing Transaction ~~(in which~~between National Grid NTS ~~is one of the Trading Participants)~~and a User, pursuant to which the User agrees to make a Disposing Trade Nomination;"

*Amend paragraph 1.4.1(e) to read as follows:*

"(e) a "**Market Balancing Sell Action**" is the effecting of a ~~Market~~Balancing Transaction ~~(in which~~between National Grid NTS ~~is one of the Trading Participants)~~and a User, pursuant to which the User agrees to make an Acquiring Trade Nomination;

*Insert the following as new paragraphs 1.4.1(h) to (j):*

"(h) "**Balancing Transaction**" is a Market Transaction or a Non-Trading System Transaction;

(i) "**Balancing Transaction Charge**" is a Market Transaction Charge or a Non-Trading System Transaction Charge; and

(j) "**Balancing Action Offer Price**" is the Market Offer Price or Non-Trading System Offer Price (as the case may be) in respect of a Balancing Transaction."

*Insert the following as a new paragraph 1.4.3:*

"1.4.3 For the purposes of the Code:

(a) the "highest Market Offer Price" is either the highest Market Offer Price or highest Non-Trading System Offer Price for the Gas Flow Day in question; and

(b) the "lowest Market Offer Price" is either the lowest Market Offer Price or lowest Non-Trading System Offer Price for the Gas Flow Day in question."

*Amend paragraph 2.1.3(a) to read as follows:*

"(a) "**Trading System**" is an electronic trading system provided and operated by the Trading System Operator for the purposes described in paragraph 2.1.1; provided that references to the Trading System shall not include any part of such system by means of which transactions other than Market Transactions may be effected, or by means of which Market Transactions (other than Multi-Day Balancing Transactions) may be effected earlier than the 12:00 hours on the Day before the Gas Flow Day;"

*Amend paragraph 2.2.9 to read as follows:*

"2.2.9 The Market Balancing Action Charges payable pursuant to paragraph 2.2.8 shall:

(a) in the case of Multi-Day Balancing Transactions, be calculated on the basis of the original Market Offer Price; and

(b) in the case of any other Market Transaction, be calculated on the basis of the Market Offer Price;

and such Market Balancing Action Charges shall be invoiced and are payable in accordance Section S."

*Insert the following as new paragraphs 3 and 4:*

## 3. Non-Trading System Transactions

3.1.1 For the purposes of the Code:

(a) A "**Non-Trading System Transaction**" is a transaction effected (other than by means of the Trading System) between National Grid NTS and a User who is not a Trading Participant, pursuant to which each of National Grid NTS and the User agrees to make equivalent Trade Nominations (so that the one such participant agrees to make an Acquiring Trade Nomination, and the other such participant agrees to make a Disposing Trade Nomination);

(b) "**Non-Trading System Offer Price**" is (subject to paragraph 4) the price (in pence/kWh) specified in relation to a Non-Trading System Offer by the party making the Non-Trading System Offer, and the "**original**" Non-Trading System Offer Price is the price (in pence/kWh) specified by the party making the Non-Trading System Offer when posting the Non-Trading System Offer without applying the provisions of Section D4 to such price;

(c) "**Non-Trading System Offer**" is an offer made by a User who is not a Trading Participant or National Grid (other than by way of the Trading System), acceptance of which will effect a Non-Trading System Transaction;

(d) the "**Non-Trading System Transaction Charge**" is the Non-Trading System Transaction Quantity multiplied by the Non-Trading System Offer Price;

(e) the "**Non-Trading System Transaction Quantity**" is the quantity which is the Trade Nomination Quantity in respect of the Trade Nominations to be made pursuant to acceptance of the Non-Trading System Offer.

3.1.2 Subject to paragraph 4.1.1, National Grid NTS may only enter into Non-Trading System Transactions only in relation to a Gas Flow Day in respect of which a Gas Balancing Alert is in place.

3.1.3 Where National Grid NTS takes a Market Balancing Action that is a Non-Trading System Transaction:

(a) in the case of a Market Balancing Sell Action (or negatively priced Market Balancing Buy Action) the User shall pay to National Grid NTS the Market Balancing Action Charge;

(b) in the case of a Market Balancing Buy Action (or negatively priced Market Balancing Sell Action) National Grid NTS shall pay the User the Market Balancing Action Charge.

3.1.4 The Market Balancing Action Charges payable pursuant to paragraph 3.1.3 shall:

(a) in the case of Multi-Day Balancing Transactions, be calculated on the basis of the original Non-Trading System Offer Price; and

(b) in the case of any other Non-Trading System Transaction, be calculated on the basis of the Non-Trading System Offer Price;

and such Market Balancing Action Charges shall be invoiced and are payable in accordance Section S.

## 4. Multi-Day Balancing Actions

4.1.1 Where a User makes a Market Offer or a Non-Trading System Offer to National Grid NTS in relation to a Gas Flow Day in respect of which a Gas Balancing Alert is in place and up to six (6) subsequent consecutive Gas Flow Days, and it is a condition of accepting such Market Offer or Non-Trading System Offer that National Grid NTS and the User makes (or, in the case of a Market Offer, the Trading System Operator makes on their behalf) the appropriate Trade Nominations for each such Gas Flow Day, National Grid NTS shall be entitled to accept such a Market Offer or Non-Trading System Offer and accordingly enter into a Market Transaction or Non-Trading System Transaction (any such Market Transactions or Non-Trading System Transactions shall be known as "**Multi-Day Balancing Transactions**").

4.1.2 For the purposes of the Code, Multi-Day Balancing Transactions entered into by way of the Trading System will be entered into as Locational Market Transactions.

4.1.3 A Market Offer or a Non-Trading System Offer which would result in a Multi-Day Balancing Transaction must specify the same price in respect of each Day to which the Multi-Day Balancing Transaction would relate.

4.1.4 For the purposes of the Code, in relation to Multi-Day Balancing Transactions:

(a) the Market Offer Price or Non-Trading System Offer Price (as the case may be) of a Multi-Day Balancing Transaction on each Gas Flow Day to which the Multi-Day Balancing Transaction relates shall be calculated as follows:

(N)MOP = AP * (Offered Price * ND)

Where:

(N)MOP is the Market Offer Price or Non-Trading System Offer Price (as the case may be) of a Multi-Day Balancing Transaction for the Gas Flow Day in question;

AP is a factor determined as:

AP = PR / APR

PR is the probability (expressed as a percentage and estimated by National Grid NTS) of National Grid NTS requiring to take Market Balancing Buy Actions (where the Multi-Day Balancing Transaction is a Market Balancing Buy Action) or Market Balancing Sell Actions (where the Multi-Day Balancing Transaction is a Market Balancing Sell Action) on the Gas Flow Day in question;

APR is the sum of the PRs for each Gas Flow Day to which the Multi-Day Balancing Transaction relates;

Offered Price is the price (in pence/kWh) offered by the User when making a Market Offer or a Non-Trading System Offer that resulted in the Multi-Day Balancing Transaction;

ND is the number of Gas Flow Days to which the Multi-Day Balancing Transaction relates;

(b) references to Market Balancing Action Charges in the Code (other than in Section S or in the definition of "Energy Balancing Charges" in GTC Section C1) relating to Multi-Day Balancing Transactions shall (unless the context expressly requires otherwise) be calculated using the Market Offer Price or Non-Trading System Offer Price (as the case may be) as adjusted pursuant to paragraph 4.1.4(a); and

(c) references to Market Balancing Action Charges relating to Multi-Day Balancing Transactions in Section S and in the definition of "Energy Balancing Charges" in GTC Section C1 shall (unless the context expressly requires otherwise) be calculated using the original Market Offer Price or original Non-Trading System Offer Price (as the case may be).

4.1.5 For the purposes of Section F:

(a) the Market Offer Price or Non-Trading System Offer Price (as the case may be) of a Multi-Day Balancing Transaction will only be used in the determination of the System Marginal Buy Price pursuant to Section F1.2.1(a) where the Multi-Day Balancing Transaction is a Market Balancing Buy Action; and

(b) the Market Offer Price or Non-Trading System Offer Price (as the case may be) of a Multi-Day Balancing Transaction will only be used in the determination of the System Marginal Sell Price pursuant to Section F1.2.1(b) where the Multi-Day Balancing Transaction is a Market Balancing Sell Action.

4.1.6 For the purposes of calculating the System Average Price pursuant to Section F1.2.1(c), where the Market Offer Price or Non-Trading System Offer Price (as the case may be) of a Multi-Day Balancing Transaction (as determined pursuant to paragraph 4.1.4) equals zero in relation to a

Gas Flow Day, then the Trade Nomination Quantity of such Multi-Day Balancing Transaction for that Gas Flow Day shall be deemed to be zero.

4.1.7 For the purposes of calculating the System Marginal Sell Price pursuant to Section F1.2.1(b), where the Market Offer Price or Non-Trading System Offer Price (as the case may be) of a Multi-Day Balancing Transaction (as determined pursuant to paragraph 4.1.4) equals zero in relation to a Gas Flow Day, then such Market Offer Price or Non-Trading System Offer Price shall be excluded from the calculation of the System Marginal Sell Price pursuant to Section F1.2.1(b).

4.1.8 For the purposes of the Code, each Multi-Day Balancing Transaction entered into by National Grid NTS by way of the Trading System shall be deemed to be separate Market Transactions for each Gas Flow Day to which the Multi-Day Balancing Transaction relates."

*Amend paragraph 1.2(c) of Annex D-1 to read as follows:*

"(c) "**Market Offer Price**" is (subject to Section D4) the price (in pence/kWh) specified by the Originating Participant when posting a Market Offer, and the "**original**" Market Offer Price is the price (in pence/kWh) specified by the Originating Participant when posting a Market Offer without applying the provisions of Section D4 to such price;"

*Amend paragraph 3.2(d) of Annex D-1 to read as follows:*

"(d) in the case of:

(i) a Market Offer which, if accepted, would result in a Multi-Day Balancing Transaction, the Market Offer Specified Quantity;

(ii) any other Market Offer, the Market Offer Specified Quantity or the Market Offer Specified Rate;"

*Amend paragraph 3.2(e) of Annex D-1 to read as follows:*

"(e) the original Market Offer Price."

*Amend paragraph 4.1 of Annex D-1 to read as follows:*

"4.1 Trading Participants may not post:

(a) a Market Offer which, if accepted, would result in a Multi-Day Balancing Transaction specifying a Market Offer Date for the final Day of such Multi-Day Balancing Transaction falling more than 7 days after the day on which the Market Offer was posted; and

~~(b)~~ ~~a~~any other Market Offer specifying a Market Offer Date falling more than 7 days after the day on which the Market Offer was posted."

*Amend paragraph 4.4 of Annex D-1 to read as follows:*

"4.4 When posting a Market Offer (other than a Market Offer which, if accepted, would result in a Multi-Day Balancing Transaction) an Originating Participant may specify that the Market Offer (an "**Option**

**Market Offer**") is linked to other Market Offers (a "**Related Market Offer**") made by the Originating Participant; and on acceptance of an Option Market Offer each other Related Market Offer shall no longer be capable of being accepted by any Trading Participant."

*Amend paragraph 5.1 of Annex D-1 to read as follows:*

"5.1 Except in the case of Multi-Day Balancing Transactions, Market Offers in respect of a Market Offer Date will be capable of acceptance by Trading Participants between 12:00 hours on the Day preceding the Market Offer Date and 03:35 hours on the Market Offer Date. Market Offers in respect of Multi-Day Balancing Transactions will only be capable of acceptance by Trading Participants between 12:00 hours on the Day preceding the first Day to which the Multi-Day Balancing Transaction relates and 03:35 hours on the first Day to which the Multi-Day Balancing Transaction relates."

*Amend paragraph 5.4(b) of Annex D-1 to read as follows:*

(b) where the Market Offer was to effect a Physical Market Transaction, not later than ~~5 minutes after acceptance of the Market Offer, submit the following details to National Grid NTS~~:

(i) 5 minutes after acceptance of the Market Offer (which would not result in a Multi-Day Balancing Transaction) submit the details listed in this paragraph (b) to National Grid NTS; or

(ii) 5 minutes after acceptance of the Market Offer (which would result in a Multi-Day Balancing Transaction) submit in respect of the first Day to which the Multi-Day Balancing Transaction relates the details listed in this paragraph (b) to National Grid NTS;

(iii) 5 minutes after acceptance of the Market Offer (which would result in a Multi-Day Balancing Transaction) submit in respect of the second Day to which the Multi-Day Balancing Transaction relates the details listed in this paragraph (b) to National Grid NTS where the acceptance of the Market Offer occurs after 12:00 hours on the first Day to which the Multi-Day Balancing Transaction relates;

(iv) 12:05 hours on each Day to which a Multi-Day Balancing Transaction relates the details listed in this paragraph (b) to National Grid NTS in respect of such Day (except to the extent such details have already been provided pursuant to paragraph (ii) or (iii));

(v) The details listed in this paragraph (b) are:

~~(i)~~(1) the Market Transaction ID;

~~(ii)~~(2) the Market Offer Date;

~~(iii)~~(3) the identity of the Originating Participant;

~~(iv)~~(4) whether the Originating Participant has agreed to make an Acquiring Trade Nomination or a Disposing Trade Nomination;

~~(v)~~(5) the quantity in respect of which the Trading Participants effected the Market Transaction;

~~(vi)~~(6) the relevant Market Transaction Type and, where acceptance has given rise to a Locational Market Transaction, the Market Transaction System Point;

~~(vii)~~(7) the time at which the Market Offer was accepted and the Transaction Effective Time;

~~(viii)~~(8) where National Grid NTS is a party to the Market Transaction, the original Market Offer Price (expressed to four decimal places and as either a positive or negative), the National Grid NTS Reason Code and the National Grid NTS Batch Code;"

*Amend paragraph 7(b) of Annex D-1 to read as follows:*

"(b) in respect of each Market Transaction effected in respect of such Day to which National Grid NTS was a party, the Market Offer Date, the Market Transaction ID the National Grid NTS Batch Code, the Market Transaction Quantity, the original Market Offer Price, the National Grid NTS Reason Code the Market Transaction Type, the time at which the Market Transaction was effected and whether National Grid NTS made a Disposing Trade Nomination or an Acquiring Trade Nomination."

## UNIFORM NETWORK CODE - TRANSPORTATION PRINCIPAL DOCUMENT

## SECTION F - SYSTEM CLEARING, BALANCING CHARGES AND NEUTRALITY

*Amend paragraph 1.2.1(a)(ii) to read as follows:*

"(ii) the price in pence/kWh which (subject to Section D4.1.4, 4.1.5(a)) is equal to the highest ~~Market~~Balancing Action Offer Price in relation to a Market Balancing Action taken for that Day;"

*Amend paragraph 1.2.1(b)(ii) to read as follows:*

"(ii) the price in pence/kWh which (subject to Section D4.1.4, 4.1.5(b) and 4.1.7) is equal to the lowest ~~Market~~Balancing Action Offer Price in relation to a Market Balancing Action taken for that Day;"

*Amend paragraph 1.2.1(c) to read as follows:*

"(c) the "**System Average Price**" for a Day is (subject to Section D4.1.4 and 4.1.6) the price in pence/kWh calculated as the sum of all ~~Market~~Balancing Transaction Charges divided by the sum of the ~~Trade Nomination~~Market Transaction Quantities and Non-

Trading System Transaction Quantities for all ~~Market~~Balancing Transactions respectively effected in respect of that Day"

*Amend paragraph 1.2.2 to read as follows:*

"1.2.2 Where for any Day no ~~Market~~Balancing Transaction was effected (or none other than one excluded for the purposes of paragraph 1.2.1 pursuant to paragraph 1.2.3), the System Average Price for that Day shall be the arithmetic mean of the System Average Price determined under paragraph 1.2.1 (or under this paragraph) for each of the 7 preceding Days."

## UNIFORM NETWORK CODE - TRANSPORTATION PRINCIPAL DOCUMENT

## SECTION V - GENERAL

*Insert the following as new paragraphs 5.9.3, 5.9.4, 5.9.5 and 5.9.6*

"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 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 from each Storage Facility Type and delivered to the Total System on such Gas Flow Day without breaching the relevant Two Day Monitor Level; and

(b) "**Two Day Monitor Level**" means, in respect of a Storage Facility Type, a quantity of gas equal to the Safety Monitor for that Storage Facility Type plus the quantity of gas that could be withdrawn from that Storage Facility Type in two (2) Days at the maximum withdrawal rate applicable to that Storage Facility Type."

Subject Matter Expert sign off:

*I confirm that I have prepared this modification report in accordance with the Modification Rules.*

Signature:

Date :

Signed for and on behalf of Relevant Gas Transporters:

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

Signature:

Date :