#### <u>Modification Report</u> <u>Storage Withdrawal Curtailment Trade Arrangements in an Emergency</u> <u>Modification Reference Number 0052</u>

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 as Ofgem stated in their Urgency Decision letter (10th Oct 2005.):

"In reaching its decision, Ofgem has considered the details contained within the modification proposal, including the proposer's views regarding the imminent date related event (i.e. this coming winter), the potential for a significant commercial impact on market participants resulting from the recently modified cash out arrangements and the implications for security of supply if, in seeking to avoid those commercial impacts, shippers withdraw gas from storage earlier than may otherwise have been the case."

#### **Procedures Followed:**

The procedures agreed with Ofgem for this Proposal are:

Sent to Ofgem requesting Urgency	07/10/2005
Ofgem grant Urgent status	10/10/2005
Transmission Workstream/Workgroup session to	13/10/2005
consider/amend proposal	
Transmission Workstream/Workgroup session to	19/10/2005
consider/amend proposal	
Transmission Workstream/Workgroup session to	21/10/2005
consider/amend proposal (if necessary)	
Urgent Modification Proposal Issued for consultation	25/10/2005
Closeout for representations (8 business day	04/11/2005
consultation)	10/11/2005
FMR issues by Joint Office (+4 business days)	14/11/2005
Close-out for Panel Comments on responses	17/11/2005
Modification Panel Recommendation	21/11/2005
Ofgem decision expected week commencing	

#### **1.** The Modification Proposal

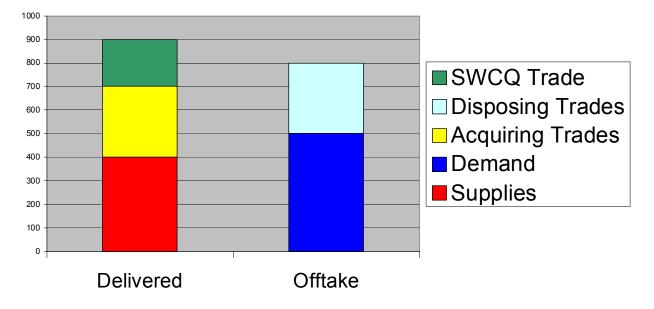
The Proposal was as follows:

"References in this proposal to "Day", "within Day", "on the Day" and "Gas Flow Day" refer to the Day beginning at 06:00 hours on one day and ending just before 06:00 hours on the following day.

Reference to "relevant Storage Facilities" are those Storage Facilities that are subject to Storage Withdrawal Curtailment on a given Day of a NGSE and "relevant Storage Operators" are the operators of those Storage Facilities.

The aim of Modification 0044 was to encourage shippers to facilitate an early demand side response should there be a general shortage of gas on the system thereby helping the Network Emergency Coordinator (NEC) avoid the need to declare a NGSE. With the implementation of Modification 0044, shippers face extremely strong incentives to avoid going short in an emergency as any such short position would be cashed out at SMP Buy price. Furthermore during an emergency, daily metered demand curtailed by transporters prior to shipper curtailment (the Emergency Curtailment Quantity (ECQ)) would be deemed to have been sold by the relevant shipper to Transco NTS at the 30 Day System Average Price, so that shippers do not 'benefit' from such actions taken by the relevant transporter under Emergency Procedures. At the same time and without any financial compensation from Transco NTS (via the cash-out mechanism or otherwise), shippers would almost certainly by prevented by the NEC from withdrawing gas from store. This is despite the fact that shippers would typically have planned to use storage withdrawals to help balance their position when supplies are tight. In effect, shippers would arbitrarily be prevented from using storage flexibility when they most needed it. No such 'physical' restrictions are placed on shippers' use of other forms of flexibility such as increasing beach deliveries ('swing') or reducing demand through commercial interruptions during an emergency. Indeed, the changes introduced with Modification 0044 actively encourage shippers to make use of these substitute forms of upward flexibility.

Under the new arrangements, even the most prudent of shippers could face SMP Buy cashout exposure because of the inability to access storage flexibility. Thus it is important that the quantity of flexibility shippers find themselves unable to use (the SWCQ) is instead acquired by the shipper from the NBP and charged at a broadly 'neutral' market price i.e. the 30 Day System Average Price. Conceptually this is the 'mirror image' of how the Emergency Curtailment Quantity (ECQ) is dealt with under the UNC.



# User Daily Imbalance - Post Storage Withdrawal Curtailment + SWCQ Trade

The above chart shows the position of a prudent shipper who at the time of an emergency declaration was slightly long with storage nominated to cover some demand. Under the current UNC (post Modification 0044) this shipper would have a User Daily Imbalance of -100 as it would have been prevented from delivering the green block. Under this proposal, the SWCQ would be considered to have been sold by Transco NTS to the shipper at 30 Day System Average Price. The result would be that the shipper would then be considered to have a positive User Daily Imbalance of 100. This long position would be cashed out at the prevailing System Average Price at the time the emergency was declared.

It is important to note that, like other acquiring and disposing transactions under the UNC such as NBP title trades and ECQ Trades, the adjustments to a shipper's balance position are financial in nature. Broadly speaking, the SWCQ Trade adjustment is designed leave <u>shipper's positions financially neutral</u> to the consequences of an NEC Storage Withdrawal Curtailment. As such the proposal is designed to ensure that 'appropriate' shipper behaviours are encouraged.

### The proposal

The SWCQ for each Day of the NGSE shall be a quantity that could have reasonably be nominated for delivery at relevant Storage Connection Points (as permitted under contract with the relevant storage providers) if it had not been for NEC invoking Storage Withdrawal Curtailment.

On each Day, the SWCQ Trade would be purchased by the shipper from Transco NTS at the 30 Day System Average Price (in concept this is effectively the reverse of the ECQ Trade which is sold by the shipper to Transco NTS). It is fair to say that, other than in very exceptional circumstances (i.e. Storage Facility failure/operational difficulties or a localised

Transco NTS transportation constraint that limits deliveries), shippers expect Input Nominations from Storage Facilities to <u>match</u> actual deliveries.

If a trade were associated with the SWCQ, a User that did not have a negative Daily Imbalance prior to Storage Withdrawal Curtailment on the first Day of the NGSE (by virtue of its expectation that its prevailing storage Input Nominations would be delivered) would not be financially exposed to the System Marginal Buy Price as a result of NEC stopping storage withdrawals. A User that was in balance or had in prospect, a positive Daily Imbalance prior to an emergency would retain a similar envisaged Daily Imbalance position following the invoking of Storage Withdrawal Curtailment. Storage Withdrawal Curtailment applies only at Storage Connection Points and is considered to take place when the NEC directs Storage Operators to limit or suspend the withdrawal of gas from a relevant Storage Facility at a relevant Storage Connection Point by specifying the end of Day delivery quantity that shall not be exceeded. Partial Storage Curtailment in the context of this proposal is considered to occur on Days during which the NEC chooses to direct end of Day delivery quantities at the relevant Storage Connection Point that exceed zero kWh.

#### **Trade and Trade Payment Arrangements**

To ensure transparency and consistency with other Eligible Balancing Actions, Storage Withdrawal Curtailment during an NGSE would represent a Market Balancing Action, only for invoicing and neutrality purposes, and thus any payments received for such actions should be considered as part of the energy element of Balancing Neutrality.

For the avoidance of doubt, any amounts paid to Transco NTS by Users for the Storage Withdrawal Curtailment Quantity Trade would not be included in the calculation of the System Marginal Buy Price, the System Marginal Sell Price or the System Average Price. Transco NTS would not pay Balancing Charges, Balancing Neutrality Charges, Scheduling Charges or Daily Imbalance Charges as a result of the Storage Withdrawal Curtailment Quantity transactions occurring. This is consistent with current practice whereby Transco NTS as residual system balancer does not pay such charges. Of course, given Transco NTS in its capacity as NEC take on a more 'command and control' role rather than a residual role in an emergency there may be merit in directing some of these costs towards Transco NTS (but that is not the subject of this proposal).

In addition to the Trade Nominations in respect of the SWCQ, it is also proposed that for those occurrences i.e. Storage Withdrawal Curtailment during a NGSE, Users would make a payment based on the SWCQ multiplied by a price determined as the simple average of the System Average Prices for the 30 Days prior to the commencement of the NGSE.

This would result in a payment from each User to Transco NTS in respect of the aggregate quantity of gas that User would have delivered but for the Storage Withdrawal Curtailment occurring during a NGSE. The Storage Withdrawal Curtailment Quantity would reduce the aggregate imbalance in the Transco NTS 'Emergency Curtailment Manager' account. The net Daily Imbalance of all Users taking into account both Storage Withdrawal Curtailment Quantities and Emergency Curtailment Quantities should be equal and opposite to the aggregate imbalance of a new Transco NTS 'Emergency Curtailment Manager' account.

### Calculation of the Storage Withdrawal Curtailment Quantity

In the interests of transparency and good governance this modification proposal requires definition of all the substantive terms for the determination and reconciliation of the SWCQ within the UNC. Thus, unlike the arrangements for ECQ calculation introduced under Modification 0044, a separate SWCQ methodology document has not been prepared.

Within each Day of the NGSE, it is proposed that shippers would, subject to strict criteria set out below, determine their own SWCQ Trade which would in turn be matched by Transco NTS within the Day. On Days when deliveries have taken place (e.g. on the first Day of any emergency or on other Days where partial Storage Withdrawal Curtailment has been directed by the NEC), these quantities will necessarily be best estimates. A post emergency SWCQ reconciliation process will be necessary when real input allocations (UDQIs) become available. Further ex post adjustments are not envisaged other than those that might arise under the normal disputes procedures set out under Section A of the UNC - General Terms, Dispute Resolution, which is designed to deal with disputes between Code signatories.

During Storage Withdrawal Curtailment, a shipper's Curtailment Quantity (CQ<sub>SCP</sub>) at each relevant Storage Connection Point would represent that shipper's best estimate of what could have reasonably been nominated for delivery by the end of the Day if it had not been for Storage Withdrawal Curtailment, (as permitted under contract with the relevant Storage Operator) taking into account any gas expected be allocated to that shipper whenever some gas withdrawals are permitted during the NGSE by the NEC at that Storage Connection Point. Any estimates of anticipated input allocations shall be best estimates and be represented as the Input Nomination of that shipper at the relevant Storage Connection Point.

On the first Day of the NGSE a shipper's best estimate of an individual curtailment quantity ( $CQ_{SCP}$ ) at each relevant Storage Connection Point may be considered to be the prevailing Input Nomination at the time the Storage Withdrawal Curtailment was called at the relevant Storage Connection Point less the shipper's best estimate of the allocated input (UDQI) to the System at that Storage Connection Point on that Day.

The CQ<sub>SCP</sub> shall also:

- a) take account of previously determined  $CQ_{SCP}$  values at an individual Storage Connection Point on previous Days of the NGSE. The cumulative  $CQ_{SCP}$  in any individual NSGE at a Storage Connection Point shall not exceed the opening stock holding of an individual shipper at the relevant Storage Facility at the start of the Day in which a NGSE was declared. This limitation reflects the theoretical 'destocking' of gas that could otherwise have taken place if it had not been for Storage Withdrawal Curtailment. Once the cumulative  $CQ_{SCP}$  equals the Day 1 opening stock level no further  $CQ_{SCP}$  claims at the relevant Storage Connection Point would be permitted. The last CQSCP determined would be to the opening stock on the first Day of the NGSE less the cumulative  $CQ_{SCP}$ .
- b) not exceed the maximum available deliverability provided to Transco NTS by the Storage Operator for the relevant Storage Facility under the relevant Storage Connection Agreement for the relevant Day.

It is recognised that Storage Operators have their own individual terms and conditions for the allocation and/or reallocation of rights to withdraw gas from store on any particular Day. It is expected that any change in the allocation of rights notified to relevant storage users by an individual Storage Operator (as normally permitted under contract with that Storage Operator during Days when the NEC has not directed Storage Withdrawal Curtailment) would be reflected, as appropriate, in a change to the shippers Input Nomination and  $CQ_{SCP}$  value at the relevant Storage Connection Point.

#### Submission of SWCQ Trades and Matching by Transco NTS

A proposed SWCQ Trade shall be notified to Transco NTS via UK Link no later than 23:00 hours on the Day to which the SWCQ Trade relates. Such proposed SWCQ Trade may be withdrawn prior to such a transaction being matched and another value 're-notified' instead prior to 23:00 hours. Within-Day SWCQ adjustment trades would also be permitted, to enable shippers to reflect changes to their best estimates of SWCQ values (e.g. where a previous relevant SWCQ Trade for a given Day had already been matched by Transco NTS). Again the deadline for submission of such trades would be 23.00 hours.

Transco NTS shall use reasonable endeavours to match, or inform the shipper of its intention to refuse to match, a proposed SWCQ Trade or SWCQ adjustment trade within 1 hour of its notification to Transco NTS. Transco NTS shall be entitled to refuse to match a SWCQ Trade or SWCQ adjustment trade notified by a shipper if the resulting SWCQ value from such transaction(s) exceeds the aggregate available deliverability of all the relevant Storage Facilities connected to the system (i.e. the sum of the latest maximum available deliverability values for that Day for each of the relevant Storage Facilities notified to Transco NTS by each of the relevant Storage Operators. Such a check is intended to deal with clearly erroneous SWCQ submissions.

For avoidance of doubt, the process used by shippers to notify SWCQ Trades and SWCQ adjustment trades shall, save for differences with regard to notification deadlines outlined above, be equivalent to those for existing acquiring and disposing trades under the UNC.

#### Reconciliation

It has been established that on certain Days of a NGSE, SWCQ Trades would require the estimation of expected deliveries at one or more Storage Connection Points. Once input allocations are known estimates would be replaced with actual quantities. It is proposed that at the Entry Close Out Date i.e. 15th Business Day of the month following the Day on which the NGSE ceased shippers would be required to submit to Transco NTS a CQ<sub>SCP</sub> Reconciliation Statement setting out the calculation of reconciled CQ<sub>SCP</sub> values for each of the individual Storage Connection Points during the NGSE and a SWCQ Reconciliation Statement summary of the determined SWCQ values which shall be the sum of the reconciled CQ<sub>SCP</sub> values that apply across all the relevant Storage Connection Points for that shipper for that Day. All statement values would be in kWh.

The CQ<sub>SCP</sub> Statement shall include the following details:

Identity of the User (ie name and ID)

Storage Connection Point (ie name and ID),

Name of the Storage Operator,

Storage Allocation Agent if different from the Storage Operator.

Opening stock of gas held by that User in the Storage Facility at the start of the first Day of the NGSE,

The prevailing Input Nomination at the time the NGSE was declared,

The end of Day Input Nominations for all Days of NGSE (this shall reflect the shippers anticipated deliveries rather than theoretical deliveries).

The actual allocated storage deliveries for each Day of the NGSE

The estimated closing stock for each Day of the NGSE

The estimated closing stock less the cumulative CQ<sub>SCP</sub>

The reconciled closing stock,

The reconciled closing stock less the cumulative CQ<sub>SCP</sub>.

The estimated CQ<sub>SCP</sub> for each Day of the NGSE

The reconciled CQ<sub>SCP</sub> for each Day of the NGSE.

The SWCQ Statement shall include the following details:

Identity of the User (i.e. name and ID)

The CQ<sub>SCP</sub> for each Storage Connection Point for each Day of the NGSE

The Total SWCQ for each Day of the NGSE

Transco NTS shall check the statements submitted by shippers and will, following agreement of any revisions with shippers, amend any incorrect data/arithmetical errors (e.g. input allocations). The ad hoc reconciliation adjustments reflecting the change to shippers' energy balance positions shall be made by Transco NTS as soon as is reasonably practicable, consistent with existing invoicing practices for making such adjustments. Adjustments would also be consistent with the 'trade and trade payment arrangements' described earlier. Ideally ad hoc adjustments covering reconciliation of all shippers' positions for a given Day of the NGSE should take place simultaneously.

### Standard Statement Pro-forma specified and maintained by Transco NTS

 $CQ_{SCP}$  Reconciliation Statement and SWCQ Statement shall be submitted to Transco NTS using an appropriate paper pro-forma or spreadsheet, as specified by Transco NTS from time to time. Attachment A shows suggested layouts for these documents. To facilitate easy reconciliation and review of aggregated  $CQ_{SCP}$  and SWCQ values, it is suggested that Transco NTS should require the submission of the  $CQ_{SCP}$  Reconciliation Statement and SWCQ Statement in the form of a standard Microsoft Excel spreadsheet.

Example spreadsheets have been submitted by the proposer to illustrate how shippers should calculate and reconcile the SWCQ values in accordance with the requirements of

this proposal. These spreadsheets are intended to assist in the legal drafting of this proposal.

#### **Disputes process and aggregate Curtailment Quantity report**

Any disputes that relate to input allocations or for example Transco NTS failing to match a legitimate SWCQ Trade allowed under the UNC would follow the normal UNC disputes process set out in Section A of the UNC – General Terms, Dispute Resolution.

#### **Consequences of not implementing this Modification Proposal**

The consequence of not implementing this proposal is that prudent shippers that are rightly seeking to maintain stocks of gas in store to help sustain gas supplies for their customers throughout the whole winter period, would be (perversely) incentivised to withdraw that gas too early for fear of their gas being 'locked in store' in a NGSE. Such behaviour could cause or bring forward, the declaration of an NGSE, should Storage Monitors be breached or are about to be breached. These perverse commercial incentives have been exacerbated by the move away from a 'neutral' emergency cash-out price to a much harsher marginal pricing regime with the implementation of Modification 0044. To illustrate this point, it is worthwhile considering the possible 30 Day System Average Price and SMP Buy price in a The values of 30 Day System Average Price and SMP Buy price might NGSE. conservatively be 50p/therm and £5/therm respectively in an NGSE. Under the pre Modification 0044 regime a shipper would pay 50p/therm cash-out for being short as a result of its gas being 'locked in store' by under Emergency Procedures whereas under the new regime it is now expected to pay £5/therm. This is hardly reasonable given one key reason it has invested in storage is to seek to cover this price risk.

In effect the current UNC discriminates against storage as a particular form of peak gas flexibility. This reduces the value and utility of storage for shippers who are more likely to turn to other forms of, perhaps less reliable, flexibility such as offshore swing and interconnector deliveries to satisfy their customer requirements including in a NGSE,

Failure to address the above concerns could threaten the ongoing security of the system and ultimately continuity of supply to customers."

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

The Proposer drew attention to the following Relevant Objectives:

- (a) "the efficient and economic operation of the pipe-line system to which this licence relates;"
- (b) "so far as is consistent with sub-paragraph (a), the coordinated, efficient and economical operation of (i) the combined pipe-line system, and/or (ii) the pipe-line system of one or more relevant gas transporters;"

In its role of residual system balancer, efficient and economic operation relies on fair, proportionate and non discriminatory incentives to be placed on shippers to seek to balance their positions under normal operations, in the lead up to a possible NGSE and during an actual NGSE. The current arrangements do not achieve this because shippers are perversely incentivised to use storage flexibility early when

the system is becoming tight (i.e. a forecast sustained cold weather snap) or when an NGSE is anticipated.

- (d) "so far as is consistent with sub-paragraphs (a) to (c) the securing of effective competition:
  - *(i) between relevant shippers;"*

The risks involved in the current situation could be considered as a barrier to competition. In particular, shippers will be encouraged to use other forms of perhaps less economic flexibility in preference to storage because they are not compensated for helping the system when the Emergency Procedures require shippers to keep gas in store. Ultimately this may help damage the prospect for further investment in storage capacity which the GB so desperately needs to support long-term security of supply.

Although it is recognised that storage capacity may need to be conserved in an emergency, Transco NTS in its development of the NEC Safety Case seem to have forgotten that they exist in a commercial world and that its free option to 'lock gas in store' without compensation has profound commercial consequences on shippers. Shippers will naturally respond to these commercial imperatives. Nevertheless shippers are acutely aware of their wider obligations to customers, which may lead them moderate their response which may in fact put a brake on how fast gas stocks are reduced.

It would be wrong for prudent shippers who have chosen to rely heavily on storage capacity to meet peak supplies to customers to be unduly discriminated against, just because less prudent shippers have decided to withdraw gas from storage at must faster rates. By addressing the perverse incentive that penalises shippers from maintaining adequate stocks of gas in store, prudent shippers are less disadvantaged than before. Thus implementation of this proposal will promote greater and more effective competition in the shipping and supply of gas."

Additional arguments considered in Workstream discussions included:

(c) "so far as is consistent with sub-paragraphs (a) and (b), the effective discharge of the licensee's obligations under this licence;"

The Transporters have a licence obligation (Standard Special Condition A6) to secure that no shipper, supplier or DN operator "obtains any unfair commercial advantage from a preferential or discriminatory arrangement." It has been shown that the current situation is discriminatory, particularly for shippers who have invested in storage and have used it prudently. This situation is therefore inconsistent with economic and efficient discharge of licence obligations and implementation of this Proposal would serve to correct this.

(e) "so far as is consistent with sub-paragraphs (a) to (d), the provision of reasonable incentives for relevant suppliers to secure that the domestic customer supply security standards are met....."

This Proposal seeks to restore the incentives for shippers to act prudently in their management of storage stocks so that there will be adequate stocks in place for a 1 in 50 Severe Winter.

EDFT stated that, "The current arrangements undoubtedly encourage storage Users to withdraw gas prematurely which in turn may cause an actual NGSE. This proposal would remove this incongruity and reduce the need for the System Operator to take balancing actions."

EDFT added, "The current arrangements discriminate against shippers which elect to hold gas in store, as a source of flexibility, as opposed to those which have access to competing forms of flexibility. The "locking" in of gas in store through effective command and control, undermines the value of the gas in store and by association investment in UK storage facilities. It is absurd and indefensible that in a competitive market the value of a particular form of contract can be undermined by the actions of a third party. This proposal recognises, to some degree, the value of the gas held in store and better aligns the commercial incentives on all users accessing flexible gas supplies from whichever source they wish to contract. "

NGT stated, "The Proposal might weaken the incentives on Users to balance their own positions as under this Proposal National Grid NTS will, under the conditions specified, partially undertake this activity on their behalf. This will result from Users being able to affect their imbalance positions via the SWCQ without having to make the corresponding adjustments to either their supplies or demands. The residual gas balancing role would therefore need to expand to cover these instances. Furthermore the statement in the proposal that each NGSE event would be considered separately thus allowing the User to seek relief from cashout for the same gas stocks on a number of occasions would further relevant objective A11 (a), the efficient and economic operation of the system or, relevant objective A11 (d), the securing of effective competition."

NGT continued, "National Grid NTS understands from discussion in the Transmission Workstream that the intent of the Proposal is that any costs resulting from the scheme would be managed via the balancing neutrality mechanism. Those Users with a greater weighting towards storage holdings as a percentage of their annual throughput may obtain commercial benefits, at the expense of those Users with a greater weighting towards beach deliveries as a percentage of their annual throughput, resulting from the smearing of the additional costs via the balancing neutrality mechanism. The statement in the proposal that each NGSE event would be considered separately thus allowing the User to seek relief from cashout for the same gas stocks on a number of occasions would reinforce the impact of this smearing effect. We do not consider this would further the relevant objective A11 (d), the securing of effective competition."

NGT stated, "With regard to the statement put forward by the proposer in its discussion of the relevant objective (d) part (i) that "It would be wrong for prudent shippers who have chosen to rely heavily on storage capacity to meet peak supplies to customers to be unduly discriminated against, just because less prudent shippers have to decided to withdraw gas from storage at much faster rates....." We would like to point out that whilst it echoes the proposers concerns regarding less prudent shippers National grid NTS considers that the role of the NEC is to deal with the position on the system resulting from the behaviour of all Users in aggregate. The NEC does not have the ability to know which Users are behaving prudently or not. National Grid NTS does however understand this concern and would therefore support a full review of the roles and responsibilities for the provision of 1:50 security being undertaken."

NGT continued, "Furthermore, in contrast to the statement put forward by the proposer in its discussion of the relevant objective (c) that "It has been shown that the current situation is discriminatory, particularly for shippers who have invested in storage and have used it prudently ...." National Grid NTS considers that the outcome of this Proposal would be to provide an unduly discriminatory level of relief for certain Users from the present cash-out mechanism in the event of a safety monitor breach at the expense of other Users."

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

The proposer believed that this Modification Proposal, if implemented, would serve to restore the incentives that applied prior to the implementation of Modification Proposal 0044 for Users to make bookings of storage capacity and to manage their stocks prudently, in the context of meeting 1 in 50 Supply Security.

No adverse implications in respect of industry fragmentation were identified.

EDFT stated that it believed, "that the effect of this proposal would be to enhance security of supply. Firstly, it addresses the anomaly in the current rules which actively encourages storage users to withdraw gas from storage prematurely and secondly, because the value of storage is not unreasonably undermined, it will ensure longer term investments in storage facilities are forthcoming."

NGT added the following point of clarification, "We would like to point out that the actions taken by the NEC to curtail storage are only taken when it is evident that the lack of such action would in the event of a 1 in 50 winter result in a requirement to isolate Domestic, NDM or other Priority Loads at some point in that winter."

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

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

The proposer stated that there might be an increased requirement for the System Operator to balance the System but the quantities of gas required to fulfil this requirement would be similar to that required by Users whose ability to withdraw gas from storage had been curtailed.

EDFT stated that, "The System Operator may be required to take further actions, however, the likelihood of this occurring is reduced as it is less likely that a potential, or actual NGSE will occur."

SSE commented, "We would appreciate some clarity from NG NTS regarding the action it would take in the circumstance of a potential or actual GSMR safety monitor breach. We note that TPD Section Q specifically states that NG NTS would take no action to protect the monitors, whereas the NEC Safety Case 4.3.2.suggests that the primary transporter will have taken "all appropriate balancing actions and put into effect all practicable measures to protect the GSMR safety monitor."

The SME notes that balancing actions are not used when the System is balanced, a GSMR safety monitor breach is not necessarily associated with a System imbalance.

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

No such implications have been identified.

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

No such cost recovery has been identified.

#### 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

No such consequence has been identified.

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 stated that System implications were believed to be minor

EDFT agreed, "EDFT would expect these to minor, particularly following implementation of Mod 0044."

SSE commented, "We are unclear whether there will be any systems implications – will a new reason code be required to identify the SWCQ trades? Will there be a need to facilitate Input nominations on subsequent days of curtailment?"

The SME has not had sufficient time to obtain answers to these questions while compiling this report.

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

The Proposer stated that its Proposal, if implemented would "considerably reduce the risks facing Users who book and use storage in order to meet their demand.

If implementation of this Proposal led to increases in the activity of the System Operator in balancing the System, this might lead to the setting of higher SMP Buy Prices. Users with a deficit imbalance would therefore face a correspondingly higher exposure.

Storage Users currently curtailed, and who in consequence are cashed-out at SMP Buy, make a positive contribution to Energy Balancing Neutrality. Other Users benefit from this contribution. Implementation would therefore remove this benefit. The Proposer, believes, however, that this is a windfall benefit which Users should not expect to receive."

EDFT stated that it believed "that the Proposal better aligns risks across all Users as described previously, in fact it removes the current prevalence of undue discrimination between Users."

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

The Proposer stated in its Proposal, that: as "Users would have more confidence in their availability of storage gas, implementation would serve to restore the value of storage as a service. This might have implications for the economics of investment in storage.

Restoration of the incentives to manage storage in a prudent manner would have security of supply benefits for all parties within the gas chain including suppliers and consumers."

RWE commented that, "In the event storage contracts allow storage operators to declare force majeure in the event of withdrawal rights being curtailed following declaration of an NGSE (particularly a NGSE Gas Deficit Emergency caused by breach, or potential breach, of a Safety Monitor) implementation of this modification proposal would provide storage users with the opportunity of limiting their exposure to imbalances (both physical and financial) which their contractual terms would not otherwise entitle them to."

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 outlined in its Proposal, the following:

### Advantages

- Restoration of the incentives on Users to book sufficient storage and use it prudently.
- By restoring these incentives the value of storage would also be restored and this would, in remove a disincentive to further investment in storage which would benefit supply security.
- Where the NGSE is at Stage 1, implementation might lead to more Market Balancing Buy Actions which unlike bilateral trades between Users, would set SMP buy prices. This would increase the incentive on Users, in general, to balance on that Day.

### Disadvantages

- The current incentives which, fortuitously, through the actions of curtailed Storage Users, would tend to reduce the System Operator's requirement to take Market Balancing Buy Action, might be eroded.
- 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 11 parties:

EDF Trading	EDFT	Support
British Gas Trading Ltd	BGT	Support
E.ON UK	E.ON	Support
RWE npower	RWE	Qualified Support
Statoil (UK) Ltd	STUK	Support
National Grid Gas plc (UK Distribution)	NGD	Qualified Support
National Grid Gas plc (UK Transmission)	NGT	Not in Support
Total Gas and Power Ltd	TGP	Support
Chemical Industries Association Ltd	CIA	Not in Support
Scottish and Southern Energy plc	SSE	Support
SSE Hornsea Ltd	SSEHL	Support

Seven respondents (EDFT, BGT, E.ON, STUK, TGP, SSE & SSEHL) supported the Modification Proposal

Two respondents (RWE & NGD) offered qualified Support for the Modification Proposal

Two respondents (NGT & CIA) did not support the Modification Proposal.

### Responses relating to NWC Modification 0710 "Removal of Top-Up Arrangements"

E.ON stated, "The removal of top-up was based on an assumption that the market would deliver adequate peak flexibility cover to meet demands throughout a cold winter rather than Transco NTS. In supporting the removal of top-up shippers never envisaged that it would be replaced by a 'free-option' introduced via the NEC Safety case developed by Transco NTS. Under the pure market approach rather than the NEC interventionist approach shippers would preserve sufficient stocks of gas throughout the winter because it would make financial sense to withdraw gas when it was most likely to be worth most (i.e. this is likely to be later in the winter period).

Free options, crudely exercised by a conservative minded, risk adverse monopoly system operator can be expected to distort the workings of the market, and inappropriately shifts more risks (some of whish are very difficult to manage) on market participants. E.ON UK therefore believes that rather that continuing to looking for solutions from the competitive part of the market, greater focus should be placed on the system operators role (or rather inappropriate role) in that market. We wish to see an end to 'free options' for Transco NTS in its role as residual system balancer."

E.ON continued, "The NEC 'free option' to curtail storage withdrawals unduly discriminates against this form peak flexibility compared to substitute forms of peak flexibility such as beach 'swing' or demand reduction. If this right were to persist without appropriate shipper compensation the prospect of further investment in storage capacity could be damaged which may in turn threaten longer term security of supply an in particular the prospect of inadequate stocks to maintain supplies in a 1 in 50 Severe Winter for domestic customers."

RWE stated, "Whilst it is possible that storage users will have their withdrawal rights curtailed in a general NGSE Gas Deficit Emergency or a NGSE Critical Transportation

Constraint Emergency, this is most likely to occur as consequence of an actual or potential NGSE Gas Deficit Emergency caused by an actual or potential breach of a Safety Monitor.

Safety Monitors, and the right of the NEC to declare a NGSE Gas Deficit Emergency when Safety Monitors are breached, were introduced by way of modification proposal 710, which was implemented in October 2004. This replaced the prevailing Top Up arrangements and introduced the possibility of storage users having their withdrawal rights curtailed so as to maintain sufficient gas in store to meet the needs of NDM customers in a severe winter. However, following implementation of modification proposal 0044 the financial consequence of such curtailment has increased."

# **Responses relating to UNC Modification 0044 "Revised Emergency Cash-out & Curtailment Arrangements"**

EDFT stated, "The Proposal is consistent with Proposal 0044 which was recently implemented. It seeks to introduce a simple, but fair method for assigning value to storage gas, whilst at the same time discourage behaviour which would be detrimental to system security.

It is entirely correct that a User which has elected to use storage as a source of flexibility to support its portfolio, should be "compensated" on the occasion that access to this source is denied. In our view, the methodology set out in the proposal assigns a reasonable value to the "constrained gas" as it mirrors the approach taken in Mod Proposal 0044.

BGT commented, "Since the time earlier in the year when Shippers made Storage bookings for the winter 2005/6 period and subsequently the decision to fill the space available to them, there have been a series of changes to the rules surrounding the use of storage and its likely position in the balancing chain, and others are still under discussion. The key changes have been:

- The difference in safety monitor levels envisaged in the preliminary and final Winter Outlook Reports produced by National Grid;
- The proposal to allow National Grid to vary the safety monitors through the winter period (Mod 0050);
- The approval of Mod 0044 introducing potentially perverse incentives to withdraw gas from store earlier than might otherwise have been anticipated
- The consequential penalisation of prudent Shippers who have booked storage to meet security requirements for winter."

E.ON stated, "The perceived benefits of stimulating a shipper demand side response and encouraging the delivery of price sensitive gas were fundamental to Ofgem's decision to approve Modification 0044. In developing the 'beneficial' aspects of this proposal many shippers' considered Transco NTS failed to appreciate the commercial risks and motivations of shippers or indeed the impact of existing market rules (e.g. in relation to Safety Monitors) on these altered risks/motivations. Ofgem nevertheless recognised key weakness associated with Modification 0044 in its decision letter.

In particular the move from a 'no fault', neutral single emergency cash-out price to arguably a more market driven, cost targeted approach under Modification 0044 highlighted the absurdity of the Network Emergency Coordinator having a right to exercise a 'free option' to stop shipper's withdrawing gas from store. Shippers that acquired storage capacity and injected gas into store last summer for the forthcoming winter (2005/06) could not have reasonably anticipated that they might be exposed to a SMPbuy price (say conservatively £5/therm) as opposed to the 30 day SAP price of say 50p/therm, because the NEC might choose to exercise its 'free option1 in an emergency under the new post Modification 0044 regime."

E.ON also stated within a footnote. "NEC rights to prevent shippers withdrawing gas from storage in an emergency are currently set out in the NEC Safety Case. The Safety Case has been agreed between the Health and safety Executive and Transco NTS without consultation with shippers. Thus Transco has established a free option that has profound implications for shippers and storage operators outside the normal commercial contractual arrangements between Transco NTS and shippers (i.e. the UNC)"

RWE commented, "The proposal to introduce SWCQ Trades, is a logical way to provide such protection as it mirrors the principles behind ECQ Trades recently been established through implementation of modification proposal 0044."

STUK stated, "The aim of Modification 0044 was to encourage shippers to facilitate an early demand side response, should there be a general shortage of gas on the system, helping to avoid the need for the National Emergency Coordinator (NEC) to declare an National Gas Supply Emergency (NGSE)."

SSE noted, "We agree with the proposer that in the absence of implementing this proposal, there could be distortions in market behaviour. Players with rights to gas in store may be incentivised to nominate storage withdrawal early for fear that their gas might end up being locked in store. This position will be exacerbated as a result of the approval of urgent proposal 0044, whereby shippers now face SMP Buy cashout exposure in an emergency.

We also consider that the current arrangements effectively discriminate against storage as a risk management tool when the supply/demand position is tight. An individual shipper could face unmanageable risk as a consequence of the actions of others which in aggregate trigger a potential or actual GSMR Safety Monitor breach. This position is exacerbated by the uncertainty surrounding the conditions that would ultimately trigger an actual or potential GSMR Safety Monitor breach, which we understand are set out in NG NTS's safety case."

# Responses relating to UNC Modification Proposal 0050 "Storage Monitor Adjustment"

TGP commented that, "Total Gas & Power Limited (TGP) support implementation of Urgent Modification Proposal 52 for the following reasons:

- We note Transco's ability to set the levels and allocation of safety monitor levels remains opaque and subject to little industry consultation. This continues to be a concern given the capability for Transco's assumptions/perceptions alone to trigger a potentially unwarranted technical emergency. This concern is exacerbated by the provisions within mod proposal 50, whereby emergencies may arise as a result of information available to Transco alone without an opportunity for the market to comment upon its validity.

- In these circumstances we note the current arrangements would restrict gas availability from relevant storage facilities compromising the markets capability to effectively meet system demand. This penalises all shippers, in particular those shippers/suppliers who in good faith had secured storage supplies to meet available demand. TGP therefore support the approach within mod proposal 52, to leave shippers financially 'neutral' via an SWCQ adjustment. However, we remain concerned with the potential for gas to be inappropriately sterilised off the market during peak periods.
- TGP consider that if mod proposal 52 is not implemented, Transco's recent attempts to secure and enhance storage intervention will continue to undermine confidence in peak provision by storage, the economic incentives to construct additional storage and ultimately long-term security of supply."

NGT stated, "National Grid NTS has obligations under the UNC to publish initial Safety Monitor levels by 31 May each year for the following winter, and to publish the full Safety Monitors by 31 October. The UNC also allows us to amend monitor levels under various circumstances. Consistent with these obligations, initial monitor levels were published on an indicative basis in the 'Consultation on Winter' document on 31 May 2005.

Following the consultation process, a set of supply assumptions considered to be appropriate for the purpose of setting the Safety Monitors were derived based on the Winter Outlook Report base case representations received, and with a reduction of 10 mcm/d in the total level of supply to account for a significant level of supply-side risk at the time at which the monitors were published.

In our view, the risk of a Safety Monitor breach is considerably lower with these starting levels than it would have been given the levels published in May. Given the level of consultation and the period of time over which these monitors have been derived and published, we consider that it would not be appropriate for certain Users to be provided with the level of relief proposed from the present cash-out mechanism in the event of an actual or potential safety monitor breach."

#### **Responses related to Financial Incentives**

E.ON stated, "E.ON UK supports this proposal because it removes perverse financial incentives within the current gas regime which would otherwise encourage shippers to rapidly deplete stocks of gas in store in the lead up to a possible Network Gas Supply Emergency (NGSE). This may bring forward such a gas emergency or worse still induce an emergency that might otherwise be avoided."

E.ON continued, "Modification proposal 0052 simply seeks to redress the financial impact on shippers that are a result of the above mentioned NEC actions. In so doing this proposal removes the perverse incentive on shippers to withdraw gas from storage earlier than might otherwise have been the case in the lead up to a possible NGSE. Under the current rules (set out in the NEC Safety Case) this perverse incentive may precipitate a NGSE by causing a breach or (or indeed an anticipated breach of) Safety Monitors. Therefore, removal of this perverse incentive better facilitates the "efficient and economic operation of the pipe-line system to which this relates."

We believe the 30 day SAP price is likely to represent a fair value for any (Storage Withdrawal Curtailment Quantity Trade) taking into account the value of gas still held in

store by the shipper. The price may well be not too dissimilar to the cost of gas injected in store in the summer plus the storage usage costs and the cost that otherwise might have been incurred to replenish the stock of gas the following summer. In the context of seeking to keep shippers 'neutral' to the huge anticipated change in cash-out price from 30 Day SAP to SMPbuy, any slight disagreements as to the fair value are somewhat academic. It is also important to note that price for the ECQ Trade was similarly imprecise, but nevertheless set at the 'right' level to ensure the appropriate commercial incentives were placed on shippers to avoid an emergency. Even if the 30 Day SAP price were considered to be too low a price this could be easily view as just rewards for shippers who prudently do not seek to run their stocks down ahead of a possible emergency. Equally the 30 day SAP paid to shippers for the ECQ volume may seem a poor deal for shippers but under the Modification 0044 it was argued by Transco NTS to be the 'right' price with the 'right' incentive properties.

Like Modification 0044 this proposal focuses on behaviours leading up to an emergency with the aim of incentivising 'appropriate' shipper behaviours to help avoid an emergency happening in the first place. It has been suggested that the financial adjustment (i.e. the Storage Withdrawal Curtailment Quantity Trade) described in this proposal may make shippers less inclined to physically take actions to increase deliveries/reduce demands on the system during an actual emergency. This is clearly absurd as shippers will be handsomely rewarded for going 'long' (i.e. will be paid the prevailing SAP at the time the emergency was called which conservatively might be say  $\pounds 3$ /therm). Not only that if costs exceed this value claims for such additional costs can be lodged.

This proposal also enhances competition as prudent shippers who are seeking to conserve stocks for later in the winter will not be unduly discriminated against simply because less prudent shippers have chosen to withdraw gas from store at faster rates."

STUK stated, "Since the implementation of 0044 shippers face strong incentives to avoid going short in an emergency as the short position would be subject to a SMP Buy cashout price. At the same time, shippers could be prevented by the NEC from withdrawing gas from Store, even though shippers would have been expecting to use storage withdrawals to balance positions when supplies are tight. Therefore even the most prudent of shippers would face exposure to SMP buy price, due to their inability to access storage gas.

This proposal aims to ensure that a shippers financial position remains neutral to the consequences of an NEC storage curtailment, by using a Storage Withdrawal Curtailment (SWCQ) trade at 30 day SAP. Implementation of this proposal will remove the perverse incentive on shippers, who were seeking to maintain their storage supplies for customers throughout the winter period, to withdraw gas from store too early for fear of it being locked in, and promoting the onset of a gas supply emergency.

The implementation of this proposal would also restore the value of storage, encouraging investment into new and existing facilities, benefiting security of supply."

CIA noted that, "the arrangements would only be invoked during an emergency, and that without this modification shippers would be perversely incentivised to withdraw gas from storage earlier than might have been the case in the lead up to a possible Network Gas Supply Emergency. We accept that the Storage Withdrawal Curtailment Quantity (SWCQ) is designed to leave a shipper's position financially neutral to any consequences imposed by the Network Emergency Co-ordinator, however, we question whether the rules should be amended to make gas shippers financially neutral in an emergency while consumers affected by the emergency will have high costs and no compensation."

NGT stated, "If the Proposal is implemented and the proposed arrangements were to be instigated there is the possibility that the price specified for the SWCQ (30 day average SAP) might be too low leading to a disincentive for Users to procure price sensitive supplies, which might then have a negative impact on security of supply or result in higher cash-out prices as a result of an increased requirement on the residual system balancer to trade. The proposer refers to an effect of the proposal being that the role of Residual Balancer may be increased. We consider that the potential increase in this role could be similar to that conceived for the previous role of Top Up Manager. The Ofgem document: "The Review of Top Up arrangements in Gas: Conclusions Document", identified potential Top-Up winter injection costs of between £20m (low case, average winter) and £600m (high case, 1 in 50 cold winter) under the existing Top-Up arrangements at that time. National Grid NTS considers that the potential reintroduction of costs of this magnitude smeared through the Balancing Neutrality arrangements would not further the relevant objective A11 (d), the securing of effective competition."

NGT commented, "With respect to the Proposer's statement that; "The consequence of not implementing the Proposal is that prudent Shippers that are rightly seeking to maintain stocks of gas in store to help sustain gas supplies for their customers throughout the whole winter period, would be perversely incentivised to withdraw that gas too early for fear of their gas being 'locked in store' in a NGSE. Such behaviour could cause or bring forward, the declaration of an NGSE, should Storage Monitors be breached or are about to breached." National Grid NTS does not consider that the existing commercial arrangements provide such an incentive for certain Users to behave in this manner. On the contrary, we believe this incentive, if it exists, should be counter balanced and out weighed by the wider industry benefit of ensuring that sufficient storage stocks are maintained for all Non-Daily Metered consumers including domestic loads, and Priority Loads to meet their demands during a severe Winter period (1 in 50)."

### **Responses related to Determination of the SWQC**

EDFT stated, "EDFT is entirely comfortable with the "self certification" approach adopted in the proposal with regards the determination of the SWCQ. This approach recognises the fact that contracts between facility owner and users are individual and unlikely to be consistent across all facilities. The imposition of restrictive rules would undermine current contracts and inhibit the development of competition between the facilities.

That being said, the proposal does set out criteria by which the User must comply when determining the volume of the SWCQ trade. In the event that a User engineers a commercially advantageous position which does not equate to its physical capabilities, then EDFT believes that this will be evident and can be acted upon through the UNC or Licence routes.""

NGD commented that, "Distribution is of the view that had the proposal been limited to Day 1 of an emergency, support for implementation would have been unconditional. It seems only fair that if a shipper is confident that it would have been able to balance on a day, and on that day an emergency is called, where a virtual balancing debit is created by as the result of an Emergency Curtailment Quantity ("ECQ") being applied, it seems only reasonable this should be capable of being offset using an Storage Withdrawal Curtailment Quantity ("SWCQ").

However, this proposal is not limited to Day 1 of an emergency. The ramifications of implementation of this proposal extend beyond the transient effects of Day 1 of an emergency into the "steady-state" arrangements that would exist during a continuing Stage 1 emergency. The difference between the ECQ and the SWCQ is that where a "steady-state" Stage 1 emergency is in progress, no ECQ would be generated but the shipper would be able to generate a SWCQ for itself by nominating gas out of storage. Where a Stage 1 emergency is in progress for a number of days, a "storage-heavy" shipper could nominate at maximum out of storage as, by doing so, would be able to balance a portion of its demand at a cost of 30 Day SAP. Effectively, the shipper would get a low-cost balancing credit for the virtual input and later, once the emergency had been lifted, would still be able to take the same unit out of storage physically and gain a further balancing credit."

CIA had concerns, "regarding the methodology proposed which would allow shippers to obtain virtual gas from storage. We believe that on the day when an emergency is called then storage nominations should be respected via this modification, however, after this time it is not certain what actions a shipper would take. Shippers need to be incentivised to balance their position. By giving shippers the option to still nominate from storage on subsequent days will not help the UK to attract gas supplies and potentially reduce the length of an emergency."

SSE stated, "We are pleased to see that the methodology to be used to calculate the SWCQ will be contained within the UNC.

It is appropriate that shippers would determine the volume of the trade, which would be conducted within day – this is essential so that the shipper can take account of the trade in terms of its overall energy imbalance position.

On the first day of the NGSE a shipper's best estimate will be the prevailing Input Nomination at the time the curtailment was called less the best estimate of the UDQI on the day. We presume that the legal drafting will make provision for circumstances where curtailment is called day ahead or part way through the day.

We also recall from discussions in the Transmission Workstream that there would need to be a change to the Input Nomination rules in the UNC to permit shippers to make nominations on subsequent days of curtailment. This does not seem to have been included in the amended proposal. We believe that this point is particularly relevant given that UNC TPD Section Q states that the emergency revocation notice has to be issued by 1000 on the preceding day. We interpret this to mean that if the emergency is called part way through the day i.e. after 1000 the emergency would not be revoked until D+2 and therefore shippers would need to make SWCQ claims for D+1 as well."

SSE continued, "We note that the shipper has to notify NG NTS of the proposed SWCQ trade no later than 2300 on the Day to which the trade relates and that NG NTS is to use reasonable endeavours to match the trade within 1 hour. We do not understand that need for this restriction, when Trade Nominations can be made until 0400 on D."

SSE added, "Whilst we can see the rationale for a process whereby the shipper warrants that the SWCQ claim it has made is appropriate, we are not entirely sure that it would be appropriate to provide such commercially sensitive information, for example, about individual storage stock holdings, to National Grid NTS. It would be helpful to understand the benefits to the process in providing such information."

### **Responses related to Trade and Trade Payment**

SSE stated, "We agree that shippers affected by a NEC instruction to the Storage Operator to curtail its delivery of storage gas to the NTS should be able to make a claim for a Storage Withdrawal Curtailment Quantity (SWCQ) Trade for each day of a NGSE or potential NGSE. This SWCQ should be a quantity that could have reasonably been nominated by the shipper for delivery at relevant Storage Connection Points. The proposal should apply to a partial or complete curtailment instruction.

In the absence of legal text, we suggest that the trigger for making such claims should make reference to the instructions issued by the NEC to the Storage Operator and shippers in accordance with the provisions of its Safety Case."

SSE added, "We agree that the SWCQ Trade should be between the relevant shipper and NG NTS at the NBP and charged at a broadly neutral price. We believe that the most appropriate price is that of 30 day average SAP.

The transactions should be treated in the same way as Emergency Curtailment Quantity Trades; i.e. they should not feature in the calculation of system cashout prices.

We do not, however, agree with the proposer's suggestion that the aggregate of Storage Withdrawal Curtailment Quantity Trades should be treated as the opposite action to the aggregate of Emergency Curtailment Quantity (ECQ) Trades. It is our understanding that in the event of a potential (Stage 1) NGSE resulting from a GSMR Safety Monitor Breach (whether potential or actual) the NEC would first issue instructions to storage operators/shippers and then evaluate the response. It might be that emergency interruption would not be invoked."

#### **Responses related to Safety Case issues**

SSEHL made the following comments, "SSE Hornsea Ltd (SSEHL) has followed recent developments centred on changes made to the NEC's Safety Case after the implementation of Modification 710 "Removal of Top-up Arrangements" with increasing concern. It would appear that the NEC made the change to its Safety Case in response to legal advice it received concerning its duties following a Safety Monitor breach. Specifically that it would not be acceptable for the NEC to allow gas to continue to flow from affected storage facilities where it was clear that the Safety Monitor had been, or was about to be breached. It is regrettable that the change made to the Safety Case in response to this legal advice has undermined the central tenet on which the removal of Top-up rested.

SSEHL of course, recognises that storage provides a natural fit with the requirement to maintain reserves and would have an important role supporting the NEC in a Supply Emergency. However, we believe that NG should negotiate the provision of these services and not simply impose obligations on the owners, operators and users of gas storage facilities. Indeed, we are alarmed that storage users who secured storage capacity prior to the change to the Safety Case now find themselves facing an unlimited financial exposure. It is ridiculous that future investment in storage should be so undermined when the NEC have set it as the cornerstone of their Safety Case.

In the context of the above, SSEHL supports Modification Proposal 0052 on the basis that it will provide some mitigation of the potentially considerable financial risk that storage users would otherwise face as a result of any storage withdrawal curtailment. We strongly agree with the proposer's assertion that in the absence of this change, the Safety Case discriminates against storage, reduces its value to users and will ultimately, discourage investment in new projects and prejudice security of supply.

On the whole, we believe that the arrangements detailed within the proposal are workable and agree that adopting the 30 Day SAP as the SWCQ trade price should provide an appropriate level of compensation to storage users. We would however, point out that there may be a conflict between the input allocation principles described in the proposal and those in existing contracts between Storage Operators and Users which would need to be resolved before implementation."

#### **Responses related to Potential Regime abuse**

RWE commented, "We note that during the course of the development of the modification the requirement for shippers to provide supporting information on a daily basis backing up their SWCQ Trades has been withdrawn in favour of reconciliation at D+15. Also the original proposal for the SWCQ claims to potentially be subject to review by the UNC Committee and Ofgem has been withdrawn.

Whilst we are not opposed to these changes (as they reduce administrative inefficiency and overcome potential issues of individual shipper information being made available to the UNC Committee) we are concerned that this could leave the process potentially open to gaming, which would disadvantage shippers collectively through neutrality.

We would therefore expect Ofgem to consider using their general powers to request information regarding the reconciliation process in the event there is evidence, whether anecdotal of otherwise, to suggest storage users have made SWCQ Trades to a greater extent than they were contractually entitled to do so.

We also have concerns about shippers being able to make within day SWCQ Trade adjustments within day, particularly as some of these might be SWCQ Trade sales from shippers to Transco (to adjust SWCQ Trade sales from Transco to shippers).

Whilst this might be used to adjust trades on the day when an emergency is declared and to take account of gas being flowed from storage facilities (on instruction of the NEC) to meet the demand of customers protected by the Safety Monitor, a simpler approach may be to resolve this through the reconciliation process.

We would certainly not envisage it being required to reflect flexibility in physical withdrawal rights that might prevail under normal operating conditions as the modification proposal implies. Emergencies are clearly not normal operating conditions and physical gas is unlikely to be flowing from storage facilities in any great quantity during periods of curtailment."

#### **Responses suggesting the requirement for further debate and development**

BGT commented, "We see this proposal as a positive step towards redressing some of these issues. We recognise that at this stage in the winter it is impossible to reach a perfect solution and as such would recommend that debate is commenced immediately to consider further improvements to the regime in advance of the next storage booking season. This is in order that players can more accurately assess the value of storage in a controlled manner eg. by considering how National Grid can be financially incentivised to act correctly."

E.ON added, "Concerns that the existing tight supply situation coinciding with a colder than average winter might lead to a NGSE, have focused industry efforts on measures designed to minimise the chances of such outcome. Unfortunately the short-time available to develop suitable mitigating measures has meant that any proposals and initiatives pursued by industry participants have necessarily happened in a rather piecemeal fashion."

E.ON continued, "Nevertheless we recognise it is likely to be difficult for Transco NTS to revisit the whole Storage Monitor concept this year. Modification proposal 0052 is therefore a pragmatic acknowledgement that the flawed Storage Monitor concept is probably here to stay, for the time being at least. It is also recognised that it is unlikely that Transco NTS will volunteer to pursue its abolition with the HSE.

It is important to note that that the industry has put a significant amount of collective effort in working up the details of this proposal, especially in regard to procedural matters associated with calculation and reconciliation of SWCQ values. It is recognised that this proposal may represent an interim solution in anticipation of longer term moves to abolish the Storage Monitor concept. Nevertheless it is vital that the current perverse incentives to withdraw gas from storage ahead of an emergency are removed and shippers are protected from being unfairly penalised from being unable to withdraw gas from store in such an emergency."

NGD commented that, "National Grid Gas plc (UK Distribution) ("Distribution") is of the opinion that, providing shippers as a group are comfortable with the potential for specific shippers with gas "locked-in-store" to be able to balance using virtual inputs into the system, while physical gas deficits are resolved by the residual balancer using gas sourced from the market, then Distribution is prepared to support implementation.

As stated above, Distribution's position is conditional. The conditionality is due to restricted discussion there has been on the commercial impacts of the proposal. Most of the Workstream discussion has focussed on refining the rules to make the proposal capable of being implemented with little debate devoted to the effects of implementation. For the conditionality to be satisfied, a significant proportion of representations from shippers would have to support, or support in principle, implementation. Shippers would have to demonstrate they are cognisant of the risk they are running with respect to smeared balancing charges. This would imply that the risk is capable of being managed and implementation would not be to the detriment of competition."

NGD continued, "As Distribution stated earlier, virtual inputs result in physical imbalances which would have to be resolved by the residual balancer. The net effect would

be balancing costs that would have to be smeared across the shipping community. Implementation of this proposal would present a cure for a shipper with gas locked in store, by allowing the value of that gas to be extracted during an emergency, but in meeting this objective, there is the potential for the benefits to be outweighed by the creation of perverse incentives and inappropriate cost targeting.

Ofgem must also be confident that by allowing units of gas in store to be used to balance twice, does not create an undue a skew on effective competition between shippers.

To summarise, provided the shipping community, as a whole, is acceptant of the potential for inter-shipper cost transfer, and Ofgem does not consider the side-effect detrimental to competition, then Distribution would be prepared to offer support for implementation."

CIA stated that, "For this winter, we cannot support this proposal, and we do not believe that the current status quo of storage monitors in order to protect domestic load should remain. However, it is too late to change the market as we are already in winter. We note that there is a requirement to protect domestic load but that the current market arrangements need to be amended. We request that the Gas Transmission Workstream discuss this issue further with the aim of raising proposals for a market structure whereby National Grid Gas contracts for gas to protect domestic sites."

NGT added, "To conclude, National Grid NTS does not consider that the Proposal furthers the relevant objectives sufficiently to warrant support. However, we consider it to be appropriate, regardless of the outcome of this Proposal, for a full review of the roles and responsibilities for the provision of 1:50 security to be undertaken."

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

No such requirements have 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 requirements have been identified.

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

No programme for works has been identified.

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

The proposer suggested that this Proposal be implemented immediately following approval.

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 17 November 2005, of the 8 Voting Members present, capable of casting 10 votes, 9 votes were cast in favour of implementing this Modification Proposal. Therefore the Panel recommend implementation of this Proposal.

#### **18.** Transporter's Proposal

This Modification Report contains the Transporter's proposal not to modify the Code and the Transporter now seeks agreement from the Gas & Electricity Markets Authority in accordance with this report.

## **19. Text**

# <u>UNIFORM NETWORK CODE - TRANSPORTATION PRINCIPAL DOCUMENT</u> <u>SECTION F - SYSTEM CLEARING, BALANCING CHARGES AND NEUTRALITY</u>

Amend paragraph 4.4.2 to read as follows:

## "4.4.2 "Aggregate System Receipts" for a Day.....:

- (a) .....;
- (b) .....;
- (c) .....;
- (d) .....that Day;
- (e) .....that Day;-and
- (f) ....; <u>and</u>
- (g) the amounts received by National Grid NTS from Users pursuant to Section Q7.2 or Section Q7.3 in respect of Users' Storage Withdrawal Curtailment Quantity relating to that Day or any revisions thereto."

Amend paragraph 4.4.3 to read as follows:

- "4.4.3 "Aggregate System Payments" for a Day.....
  - (a) .....;
  - (b) .....that Day; and
  - (c) .....; <u>and</u>
  - (d) the amounts payable by National Grid NTS to Users pursuant to Section Q7.2 or Section Q7.3 in respect of Users' Storage Withdrawal Curtailment Quantity relating to that Day or any revisions thereto"

# UNIFORM NETWORK CODE - TRANSPORTATION PRINCIPAL DOCUMENT

# **SECTION Q - EMERGENCIES**

Insert a new paragraph 3.3.4 to read as follows:

"3.3.4 In a Network Gas Supply Emergency Gas Deficit Emergency (including a Potential Network Gas Supply Emergency Gas Deficit Emergency), where the operator of any relevant Storage Facility reduces or ceases the delivery of, or refrains from delivering (as the case may be), gas to the Total System at the relevant Storage Connection Point following a request to do so by the NEC (through National Grid NTS), then the provisions of paragraph 7 shall apply."

Amend paragraph 4.2.2 to read as follows:

- "4.2.2 In respect of each Day during a network gas Supply Emergency Gas Deficit Emergency:
  - (a) National Grid NTS shall pay to each User who delivered on a Day more gas to the Total System than it offtook on such Day an amount determined as

the User's Daily Imbalance multiplied by the relevant price, subject to paragraph 4.2.5;

(b) each User who offtook on a Day more gas from the Total System than it delivered on such Day shall pay to National Grid NTS an amount determined as the User's Daily Imbalance multiplied by the relevant price.

For the purposes of this paragraph 4.2.2, and pursuant to the provisions of paragraphs 6.2.1, and 7.2.1, a User's Daily Imbalance shall include that User's Emergency Curtailment Quantity and Storage Withdrawal Curtailment Quantity."

*Insert the following as new paragraph 7:* 

# **<u>"7. STORAGE WITHDRAWAL CURTAILMENT</u>**

# 7.1 Definitions

### 7.1.1 For the purposes of the Code:

- (a) "Storage Withdrawal Curtailment" means the reduction or cessation of delivery of gas to the Total System from a Storage Facility at the relevant Storage Connection Point by the Storage Operator following a request to do so by the NEC (through National Grid NTS);
- (b) "Storage Withdrawal Curtailment Trade Price" means the value (in pence/kWh) of the arithmetic mean of the System Average Prices determined under Section F1.2.1 or F1.2.2 but by reference to the 30 Days preceding the Day on which the Storage Withdrawal Curtailment occurred;
- (c) "Storage Withdrawal Curtailment Quantity" means, in respect of a User, the quantity of gas calculated by that User as being the sum of the aggregate quantities of gas (in kWh) that the User reasonably estimates it would have delivered (in accordance with the relevant Storage Terms) on a Day to the Total System at Storage Connection Points in respect of which Storage Withdrawal Curtailment has occurred but for the fact that Storage Withdrawal Curtailment had occurred at those Storage Connection Points, less the quantities of gas (if any) actually delivered by the User on that Day to the Total System at the Storage Connection Points in question or the quantities of gas (if any) that the User estimates will actually be delivered by the User on that Day to the Total System at the Storage Connection Points in question: provided that a User's Storage Withdrawal Curtailment Quantity in respect of each Storage Facility for any Day may not exceed a quantity equal to the lesser of
  - (i) the User's Available Curtailment Quantity on that Day; and
  - (ii) the maximum available deliverability of the Storage Facility for that Day as provided to National Grid NTS by the Storage Operator for the relevant Storage Facility under the relevant Storage Connection Agreement;
- (d) a User's "Available Curtailment Quantity" on a Day in relation to each Storage Facility is a quantity equal to the sum of:

- (i) the User's gas-in-storage in that Storage Facility immediately prior to the commencement of the Storage Withdrawal Curtailment in question; less
- (ii) the sum of the User's Storage Withdrawal Quantities in respect of that Storage Facility for each Day since the commencement of the Storage Withdrawal Curtailment in question; less
- (iii) the sum of the User's UDQOs in respect of the Storage Connection Point relating to that Storage Facility for each Day since the commencement of the Storage Withdrawal Curtailment in question; plus
- (iv) the sum of the User's UDQIs in respect of the Storage Connection Point relating to that Storage Facility for each Day since the commencement of the Storage Withdrawal Curtailment in question.

For the avoidance of doubt, on the Day of the commencement of the Storage Withdrawal Curtailment in question, the User's Available Curtailment Quantity shall be a quantity equal to the User's gas-in-storage in that Storage Facility immediately prior to the commencement of the Storage Withdrawal Curtailment in question.

# 7.2 Storage Withdrawal Curtailment Trade Arrangements

- 7.2.1 On each Day that Storage Withdrawal Curtailment occurs, then each User that has a Storage Withdrawal Curtailment Quantity will make an Acquiring Trade Nomination, and National Grid NTS will make a corresponding Disposing Trade Nomination, in each case for the User's Storage Withdrawal Curtailment Quantity. The User shall make its Acquiring Trade Nomination not later than 23:00 hours on the Day to which it relates, and any such Acquiring Trade Nomination may be withdrawn at any time prior to National Grid NTS submitting the corresponding Disposing Trade Nomination but not otherwise.
- 7.2.2 Each User will pay to National Grid NTS an amount determined as the User's Storage Withdrawal Curtailment Quantity multiplied by the Storage Withdrawal Curtailment Trade Price.
- 7.2.3 In the event that a User's estimate of its Storage Withdrawal Curtailment Quantity is changed in respect of a Day, or Storage Withdrawal Curtailment that had previously occurred in respect of that Day is removed, then such User shall calculate a revised Storage Withdrawal Curtailment Quantity, and:
  - (a) where the effect is such that a User's revised Storage Withdrawal Curtailment Quantity is greater than the User's previously calculated Storage Withdrawal Curtailment Quantity, then the User will make an Acquiring Trade Nomination, and National Grid NTS will make a corresponding Disposing Trade Nomination, in each case for the difference between the User's revised Storage Withdrawal Curtailment Quantity and the User's previously calculated Storage Withdrawal Curtailment Quantity; and

- (b) where the effect is such that a User's revised Storage Withdrawal Curtailment Quantity is less than the User's previously calculated Storage Withdrawal Curtailment Quantity, then each User that has a Storage Withdrawal Curtailment Quantity will make a Disposing Trade Nomination, and National Grid NTS will make a corresponding Acquiring Trade Nomination, in each case for the difference between the User's previously calculated Storage Withdrawal Curtailment Quantity and the User's revised Storage Withdrawal Curtailment Quantity.
- 7.2.4 In the circumstances set out in:
  - (a) paragraph 7.2.3(a), the User will pay to National Grid NTS an amount determined as the difference between the User's previously calculated Storage Withdrawal Curtailment Quantity and the User's revised Storage Withdrawal Curtailment Quantity multiplied by the Storage Withdrawal Curtailment Trade Price;
  - (b) paragraph 7.2.3(b), National Grid NTS will pay to the User an amount determined as the difference between the User's revised Storage Withdrawal Curtailment Quantity and the User's previously calculated Storage Withdrawal Curtailment Quantity multiplied by the Storage Withdrawal Curtailment Trade Price.
- 7.2.5 National Grid NTS shall use reasonable endeavours to submit the corresponding Disposing Trade Nomination or Acquiring Trade Nomination (as the case may be) pursuant to paragraph 7.2.1 or 7.2.3, or inform the User of its intention to refuse to submit the corresponding Disposing Trade Nomination or Acquiring Trade Nomination (as the case may be) pursuant to paragraph 7.2.1 or 7.2.3, within one (1) hour of the User notifying its Acquiring Trade Nomination or Disposing Trade Nomination to National Grid NTS. National Grid NTS shall be entitled to refuse to submit the corresponding Disposing Trade Nomination or Acquiring Trade Nomination (as the case may be) pursuant to paragraph 7.2.1 or 7.2.3 if the resulting Storage Withdrawal Curtailment Quantity exceeds a quantity equal to the lesser of:
  - (a) the User's Available Curtailment Quantity in respect of the relevant Storage Facility; and
  - (b) the maximum available deliverability of the relevant Storage Facility for that Day as provided to National Grid NTS by the Storage Operator for the relevant Storage Facility under the relevant Storage Connection Agreement.
- 7.2.6 National Grid NTS will not pay Balancing Charges, Balancing Neutrality Charges, Scheduling Charges or Daily Imbalance Charges as a result of Trade Nominations occurring as a result of the operation of paragraphs 7.2.1 or 7.2.3.
- 7.2.7 For the avoidance of doubt, any amounts payable by National Grid NTS pursuant to paragraph 7.2.2 or 7.2.4 shall not be included in the calculation of the System Marginal Buy Price, the System Marginal Sell Price or the System Average Price pursuant to Section F1.2 for the Day to which the Storage Withdrawal Curtailment Quantity relates.

- 7.2.8 As soon as reasonably practicable after the removal of the Storage Withdrawal Curtailment (and in event, not later than the Entry Close Out Date in respect of the Day on which the Storage Withdrawal Curtailment was removed), the User shall (on the basis of its confirmed UDQIs in respect of a Storage Facility) advise National Grid NTS (by submitting a CQSCP Statement and a SWCQ Summary Statement) of any revisions required to the User's Storage Withdrawal Quantity in relation to the relevant Storage Facility for the Days in question. The provisions of paragraph 7.3 shall apply to any such revisions.
- 7.2.9 For the purposes of Code:
  - (a) a "CQ<sub>SCP</sub> Statement" is a statement prepared by a User in relation to each Storage Connection Point in respect of which it is a User and at which Storage Withdrawal Curtailment occurred on the Days in question specifying:
    - (i) the identity of the User to which the statement relates;
    - (ii) the Storage Connection Point to which the statement relates;
    - (iii) the name of the Storage Operator;
    - (iv) the User Allocation Agent in respect of the Storage Connection Point if different from the Storage Operator;
    - (v) the User's gas-in-storage in the Storage Facility at the start of the Day on which the Storage Withdrawal Curtailment commenced;
    - (vi) the User's prevailing Input Nomination at the time the Storage Withdrawal Curtailment commenced;
    - (vii) the User's end of Day Input Nominations for all Days since the Storage Withdrawal Curtailment commenced;
    - (viii) the User's actual UDQIs at the Storage Connection Point for each Day since the Storage Withdrawal Curtailment commenced;
    - (ix) the User's estimated gas-in-storage in the Storage Facility at the end of each Day during which the Storage Withdrawal Curtailment continued;
    - (x) the User's estimated gas-in-storage in the Storage Facility at the end of each Day during which the Storage Withdrawal Curtailment continued less the User's cumulative estimated Storage Withdrawal Curtailment Quantity in respect of each Day during which the Storage Withdrawal Curtailment continued;
    - (xi) the User's actual gas-in-storage in the Storage Facility at the end of each Day during which the Storage Withdrawal Curtailment continued;
    - (xii) the User's actual gas-in-storage in the Storage Facility at the end of each Day during which the Storage Withdrawal Curtailment continued less the User's cumulative revised Storage Withdrawal

Curtailment Quantity in respect of each Day during which the Storage Withdrawal Curtailment continued;

- (xiii) the User's estimated Storage Withdrawal Curtailment Quantity in respect of each Day during which the Storage Withdrawal Curtailment continued; and
- (xiv) the User's revised Storage Withdrawal Curtailment Quantity in respect of each Day during which the Storage Withdrawal Curtailment continued.
- (b) a "SWCQ Statement" is a statement prepared by a User specifying:
  - (i) the identity of the User to which the statement relates;
  - (ii) the User's estimated Storage Withdrawal Curtailment Quantity for each Storage Connection Point in respect of each Day during which the Storage Withdrawal Curtailment continued;
  - (iii) the User's revised Storage Withdrawal Curtailment Quantity for each Storage Connection Point in respect of each Day during which the Storage Withdrawal Curtailment continued;
  - (iv) the total of the amounts specified pursuant to paragraph (ii); and
  - (v) the total of the amounts specified pursuant to paragraph (iii).

# 7.3 Storage Withdrawal Curtailment Adjustment

- 7.3.1 Where the provisions of this paragraph 7.3 apply, then:
  - (a) where the User's Storage Withdrawal Curtailment Adjustment Quantity is positive, the User will pay National Grid NTS an amount equal to the User's Storage Withdrawal Curtailment Adjustment Clearing Charge; and
  - (b) where the User's Storage Withdrawal Curtailment Adjustment Quantity is negative, National Grid NTS will pay the User an amount equal to the User's Storage Withdrawal Curtailment Adjustment Clearing Charge.
- 7.3.2 For the purposes of this paragraph 7.3:
  - (a) in respect of each Day, a User's "Storage Withdrawal Curtailment Adjustment Quantity" is the amount by which the User's Storage Withdrawal Curtailment Quantity advised by the User pursuant to paragraph 7.2.8 in respect of Day differs from the User's Storage Withdrawal Curtailment Quantity estimated by the User in accordance with paragraph 7.1.1(c) in respect of such Day;
  - (b) "Storage Withdrawal Curtailment Adjustment Clearing Charge" is an amount equal to the User's Storage Withdrawal Curtailment Adjustment Quantity multiplied by the Storage Withdrawal Curtailment Trade Price; and
- 7.3.3 A User's Storage Withdrawal Curtailment Adjustment Quantity is positive where the User's Storage Withdrawal Curtailment Quantity advised by the User pursuant to paragraph 7.2.8 in respect of a Day is greater than the User's Storage Withdrawal Curtailment Quantity estimated by the User in accordance with paragraph 7.1.1(c)

in respect of such Day, and is negative where the User's Storage Withdrawal Curtailment Quantity estimated by the User in accordance with paragraph 7.1.1(c) in respect of a Day is greater than the User's Storage Withdrawal Curtailment Quantity advised by the User pursuant to paragraph 7.2.8 in respect of such Day.

- 7.3.4 In addition to the amounts payable pursuant to paragraph 7.3.1:
  - (a) where the User's Daily Imbalance is negative in respect of the Day to which the Storage Withdrawal Curtailment Adjustment Quantity relates, and the Storage Withdrawal Curtailment Adjustment Quantity is negative, then the User shall pay National Grid NTS an amount equal to the Storage Withdrawal Curtailment Adjustment Quantity multiplied by the relevant buy price applicable to such Day;
  - (b) where the User's Daily Imbalance is negative in respect of the Day to which the Storage Withdrawal Curtailment Adjustment Quantity relates, and the Storage Withdrawal Curtailment Adjustment Quantity is positive (but is less in magnitude than the User's Daily Imbalance in respect of the Day to which the Storage Withdrawal Curtailment Adjustment Quantity relates), then National Grid NTS shall pay to the User an amount equal to the Storage Withdrawal Curtailment Adjustment Quantity multiplied by the relevant buy price applicable to such Day;
  - (c) where the User's Daily Imbalance is negative in respect of the Day to which the Storage Withdrawal Curtailment Adjustment Quantity relates, and the Storage Withdrawal Curtailment Adjustment Quantity is positive (and is greater in magnitude than the User's Daily Imbalance in respect of the Day to which the Storage Withdrawal Curtailment Adjustment Quantity relates), then National Grid NTS shall pay the User:
    - (i) an amount equal to the User's Daily Imbalance in respect of the Day to which the Storage Withdrawal Curtailment Adjustment Quantity relates multiplied by the relevant buy price applicable to such Day; plus
    - (ii) an amount equal to the sum of the Storage Withdrawal Curtailment Adjustment Quantity less the User's Daily Imbalance in respect of the Day to which the Storage Withdrawal Curtailment Adjustment Quantity relates, multiplied by the relevant sell price applicable to such Day;
  - (d) where the User's Daily Imbalance is positive in respect of the Day to which the Storage Withdrawal Curtailment Adjustment Quantity relates, and the Storage Withdrawal Curtailment Adjustment Quantity is positive, then National Grid NTS shall pay to the User an amount equal to the Storage Withdrawal Curtailment Adjustment Quantity multiplied by the relevant sell price applicable to such Day;
  - (e) where the User's Daily Imbalance is positive in respect of the Day to which the Storage Withdrawal Curtailment Adjustment Quantity relates, and the Storage Withdrawal Curtailment Adjustment Quantity is negative (but is

less in magnitude than the User's Daily Imbalance in respect of the Day to which the Storage Withdrawal Curtailment Adjustment Quantity relates), then the User shall pay National Grid NTS an amount equal to the Storage Withdrawal Curtailment Adjustment Quantity multiplied by the relevant sell price applicable to such Day;

- (f) where the User's Daily Imbalance is positive in respect of the Day to which the Storage Withdrawal Curtailment Adjustment Quantity relates, and the Storage Withdrawal Curtailment Adjustment Quantity is negative (and is greater in magnitude than the User's Daily Imbalance in respect of the Day to which the Storage Withdrawal Curtailment Adjustment Quantity relates), then the User shall pay National Grid NTS:
  - (i) an amount equal to the User's Daily Imbalance in respect of the Day to which the Storage Withdrawal Curtailment Adjustment Quantity relates multiplied by the relevant sell price applicable to such Day; plus
  - (ii) an amount equal to the sum of the Storage Withdrawal Curtailment Adjustment Quantity less the User's Daily Imbalance in respect of the Day to which the Storage Withdrawal Curtailment Adjustment Quantity relates, multiplied by the relevant buy price applicable to such Day.
- 7.3.5 For the purposes of paragraph 7.3.4:
  - (a) the "relevant sell price" for any Day:
    - (i) in respect of which there is a Potential Network Gas Supply Gas Deficit Emergency (but no Network Gas Supply Gas Deficit Emergency), is the System Marginal Sell Price determined under Section F1.2.2(b); and
    - (ii) in respect of which there is a Network Gas Supply Gas Deficit Emergency, the relevant price as specified in paragraph 4.2.3(a);
  - (b) the "relevant buy price" for any Day:
    - (i) in respect of which there is a Potential Network Gas Supply Gas Deficit Emergency (but no Network Gas Supply Gas Deficit Emergency), is the System Marginal Buy Price determined under Section F1.2.2(a); and
    - (ii) in respect of which there is a Network Gas Supply Gas Deficit Emergency, the relevant price as specified in paragraph 4.2.3(b);"

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 :