

Modification Report
Introduction of Gas Demand Management Reserve Arrangements
Modification Reference Number 0086
Version 2.0

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 it considered that this proposal satisfied "the criteria for granting urgent status to a modification proposal, as set out in its published guidelines". In particular, Ofgem noted that "in a tight winter, a significant demand side response may be required in order to avoid a Gas Deficit Emergency, thus securing supplies for domestic consumers." Ofgem also noted that "in order for this demand side response to be facilitated through contract, this modification proposal must be in a position to be decided upon reasonably ahead of the 2006/07 gas year, the contracts for which commence 01 October 2006."

Procedures Followed:

The procedures agreed with Ofgem for this Proposal are:

Submit proposal to Ofgem for urgency	19/05/06
Ofgem grant urgent status	24/05/06
Discuss at transmission workstream	01/06/06
Proposal issued for consultation	05/06/06
Closeout for representations	19/06/06
Final Modification Report to the panel	26/06/06
Modification panel recommendation	06/07/06
Ofgem decision expected week commencing	13/07/06
Implementation date (subject to Ofgem's decision)	20/07/06

1. The Modification Proposal

The Proposal was as follows:

"The specific changes to Uniform Network Code that we envisage are applicable as a result of this Modification Proposal are:

- This Modification Proposal seeks to require National Grid Gas NTS to put in place a tender scheme to encourage gas demand side response;
- Appropriately target costs of the scheme on a "polluter pays" principle and ensure that the incentive to balance is not eroded by feeding through the Availability Costs of the scheme into System Marginal Buy Price;
- Ensure that actions taken by National Grid Gas NTS as part of the scheme are classed as Eligible Balancing Actions as defined in section D1.4 of the Uniform Network Code;
- Allow Utilisation Prices to set the System Marginal Buy Price where applicable when actions are exercised under the scheme;

- Allow multi-day offers to be taken where appropriate under the scheme using existing methodology set out in the UNC following implementation of modification 0061;

This Modification Proposal builds on the discussions held in the recent Gas Reserve group chaired by OFGEM and looks to develop an enhanced System Operator approach. Recent analysis provided by National Grid Gas NTS may help to inform the potential range of volumes that may be contracted under any scheme.

Gaz de France ESS see this Modification Proposal as a way to facilitate change in terms of enabling Gas Demand Management Reserve Arrangements to be put in place. The development of much of the details of the tender scheme are outside of the scope of this Modification Proposal, however the terms of the demand side response tender scheme should be developed in conjunction with all Users and potential participants. We would expect the details of the scheme to begin to be drafted imminently and be developed alongside the progression of this Modification Proposal.

Consequences of non-implementation

Gaz de France ESS believes that as a consequence of non implementation of this Modification Proposal, in the light of further constraints imposed whilst the GB market transitions towards dependence upon imports of gas generally and in the light of evident nervousness in the market about Winter 2006/07 in particular, we could see more widespread disruption to our Generation and Industrial and Commercial communities.

This Modification Proposal seeks to offer a more centrally coordinated route for utilisation of the affected gas volumes in an effort to maintain security of gas supplies. In addition it removes a real barrier to entry for Industrial and Commercial consumers providing a necessary route to market. Such customers would be willing to assist National Grid NTS avoid a Network Gas Supply Emergency. This will deliver certainty around delivery of significant additional gas to the Total System through the creation of a clear incentive to participate at a time when the market could expect reduced response due to potential changes in the contracting regime but in a way that enables Daily Metered customers to properly quantify and value flexible demand response.

Background to the Proposal

Gaz de France ESS believes that the proposed Gas Reserve Arrangements are a vital tool to help secure additional demand balancing opportunities for winter 2006/07 and represents an enduring option for subsequent years to alleviate any shortfall associated with non delivery of gas supplies or excessive supply driven prices as a result of stress on the system.

It is proposed that National Grid NTS procure gas reserve via a reserve tender process. The terms of the tender process should be defined by National Grid NTS but informed by industry feedback, with arrangements organised in a similar way to the current Operating Margins Gas tender process. We envisage that National Grid NTS will define minimum requirements for inclusion within the scheme, comprising the required economic volumes, notice periods and utilisation time periods. This will enable potential participants the opportunity to tailor the extent of their availability. Participation in the tender process

would be voluntary for shippers, and volumes acquired would be additive to arrangements already in place with their customers via commercial interruption arrangements.

In the run up to and during the Winter 2005/06 security of supply issues were at the forefront of industries discussions. The 'Winter Outlook Report' 2005/06 published by National Grid NTS highlighted the importance of demand side response in maintaining the balance of the Total System during periods of high demand.

Gaz de France ESS has, in conjunction with other interested industry parties, fully participated in the Ofgem chaired Demand Side Working Group and Gas Reserve Group. At the Gas Reserve Group meeting of 1st March 2006 National Grid NTS presented a realistic scenario (1 in 10) for winter 2006/07. Their presentation highlighted that there would be a requirement for up to 60mcm/day of demand side response. Analysis from winter 2005/06 identified a demand response of around 30mcm/day in total, 22mcm of which was provided by CCGTs, suggesting an important, if modest, contribution by other DM customers. On the Gas Balancing Alert day of 13th March 2006 there was only 34mcm demand response, a level well-short of that indicated by the Winter Outlook Report of 2005/06 as necessary.

UK gas arrangements are currently based upon a market mechanism for calculation of gas cashout prices. During Winter 2005/06 we experienced an 83% rise in those cashout prices compared to 2004/05 out-turn price. Those who use gas as a primary fuel, including the CCGT and Industrial and Commercial communities, responded by reducing their gas demand, in some cases switching to alternate fuels but in others interrupting their production processes.

The Modification Proposal seeks to:

- Diversify the Security of Supply risks associated with a reliance on supply side activities, increasing participation in a more coordinated and structured manner from a wider range of demand side participants by accessing flexibility presently outside current arrangements with shippers;
- Enable National Grid NTS, in its System Operator role, currently including purchasing of gas, to identify the volumes of demand reduction available and that necessary ahead of real time and procure an appropriate volume in an efficient and economic manner;
- As a general principle those awarded gas reserve contracts should be instructed to deliver agreed demand reduction volumes when it becomes economically efficient for National Grid NTS to do so;
- Put into place further measures to utilise such volumes to assist in maintenance of the gas energy balance and the avoidance of a Gas Deficit Emergency thus protecting Domestic consumers;
- Require National Grid NTS to initiate a gas reserve tender process to procure such volumes via which participants can submit offers to provide gas reserves and National Grid NTS can administer through a transparent and targeted cost recovery mechanism;

- Build confidence in the supply/demand balance which may reduce excessive wholesale market volatility and smooth unwarranted price spikes;
- Appropriately target costs and ensure that the incentive to balance is not eroded by feeding through scheme costs into System Marginal Buy Price;
- Better assist the forecasting and investment processes for procurement and delivery of alternate fuel supplies by customers, which should deliver security of supply benefits both on the gas and electricity systems; and
- Encourage the potential development of a new element to the SO incentive scheme that will establish appropriate drivers on the National Grid NTS to carry out procurement of such additional reserve services and maintain downward pressure on costs to consumers.

Justification for National Grid NTS Involvement

National Grid NTS has statutory responsibilities to operate the Transmission System efficiently and economically. The proposed Gas Reserve Arrangement is intended to provide it with additional mechanisms for discharging the responsibility and to forestall a possible gas emergency, especially in circumstances where operational problems arise from issues with the system balance. There is precedent for National Grid NTS to do so as the framework is already partially in place given its approach to system management services and system reserve in the Procurement Guidelines.

It is intended these services will complement, not displace, shipper offered services. By creating an ex ante value for capability of Gas Reserve, the shipper will be able to pass this through to potential participants creating a clear incentive to make further quantities available for reduction bids and enabling an increase in system flexibility when supplies are tight.

Above all introduction of Gas Reserve Arrangements will enable negative demand to be used as a positive agent in the market by selling real flexibility, rather than acting as a response to excessive short-term prices that can lead to demand destruction. All the indications from last winter are that few quantities were sold back even where customers had title to gas, and this is a deficiency that needs to be corrected if the scope for demand side response is to be increased.

The involvement of National Grid NTS adds credibility generally and a single source of publicly available information to market participants and customers about the level of demand response available. National Grid NTS currently have the ability to make a discretionary adjustment to Gas Balancing Alert (GBA) trigger level; this could be used to make a positive adjustment in the case of contracted demand side response volumes to make a more accurate assessment of the supply/demand forecast. It is intended that details of tenders and call off of services will be communicated to the market in a timely manner through existing systems."

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

Gas Transporter Licence Standard Special Condition A11.1

"(a) the efficient and economic operation of the pipe-line system to which this licence relates;"

The Proposer has suggested that implementation would better facilitate this relevant objective "by ensuring that National Grid Gas NTS has an addition to the necessary but limited tools available at their disposal to facilitate its residual balancing role. Contracting for gas reserve in an economic manner in advance may protect the residual balancer from on-the-day exposure to very high prices on difficult days for the system and as such introduce additional efficiencies and reduce the overall costs of system actions. National Grid NTS will be incentivised to ensure efficient and economic procurement of the gas volumes to be utilised via this mechanism. This modification proposal will provide for additional demand response to the market at the time when the Total System most requires it."

In addition the Proposer considered that "a direct route to market for Daily Metered customers, through their shipper, backed up by a clear availability incentive will bring more demand response to the market, enhancing security of supply."

AEP suggested that the *"extent to which implementation of this proposal furthers this objective will depend on the extent to which the payment of an availability fee as an insurance premium is considered to be efficient and economic when the likely delivered volumes are taken into account. Also whether recovering these costs as a premium on the SMP buy price on short positions throughout the year is an appropriate form of cost targeting."*

AEP also raised an issue in respect of *"whether customers might receive availability payments yet not actually change their behaviour such that they self interrupt before they are actually called to provide the service. Whilst this suppresses demand, National Grid may have a falsely high view of additional demand side response it could call. Similarly structures will be needed to ensure that utilisation fees are not paid to reduce offtake when the site did not intend to flow at that level. The default quantity may be overly generous in this respect."*

AEP was aware that *"there have been difficulties between shippers and consumers in reaching agreed terms for demand side response in the past. However even though these arrangements might provide a framework for discussion, customers will still need to agree all these elements with their shipper who may then participate in the NG tender on their behalf. It therefore seems that the availability payment is the only element that is in addition to any agreement that might be reached between customers and shipper absent these arrangements. Therefore the assessment of the proposal should focus on whether an availability payment is necessary to prompt demand side response and whether this represents good value to the industry as a whole."*

CIA suggested that implementation by *"providing an additional route to the market for demand side response,...may reduce market prices, and so may protect the residual balancer from higher prices."*

EDFE believed that *"implementation of this proposal has the potential to further this objective if the costs incurred through the availability payment fee as an*

insurance premium are economically used in this and subsequent winters. These costs could actually prove to be insignificant if they are used efficiently to avoid even higher balancing costs through higher gas and cashout prices in an emergency for example. There is a question though whether having this premium feed into cashout prices every day of the year will actually be economic and efficient when the product may only be called upon one day in the year. However, the weighted profiling of the availability payment into cashout prices across the year may resolve this issue.

There is also a question of how much DSR volume and at what price National Grid (NG) will have to tender for given that it largely depends on a view of how tight the system will be each year. We believe that incentives on NG will have to be structured such that NG undertakes efficient and economic tenders but we note that this subject has hardly been touched upon in the modification's development.

Given some of the costs involved both in terms of implementation costs for shippers/consumers, and in terms of costs avoided on a day when it is used, we believe that Ofgem should conduct an Impact Assessment to fully understand whether it is good value for the industry as a whole."

energywatch pointed out that "there seem to be few details at this stage about how the gas reserve tender arrangements would work in practice, whether there are sufficient incentives on the System Operator to meet its licence obligation on efficient and economic operation of the pipeline system in the circumstances which may give rise to use of the gas reserve tender and what those incentives may be, and about the potential implementation costs of the proposal and the underlying cost-benefit of this specific approach"

EON pointed out that "The efficient management of flows on the system is in part dependent on the accuracy of information provided by shippers to NG. The exercise of an option under this proposal appears to be no more than a 'title' transaction at the NBP, where it impossible to ascertain the anticipated level of 'turn-down' by individual customers at particular locations."

EON also believed it to be unclear "how NG will be able to distinguish between demand side response under conventional demand side contracts and those that originate from their exercising gas reserve contracts." and asked whether a "'P70 style' notification process be required?"

EON concluded that implementation of this Proposal would allow "no more than a 'paper' energy option contract that may or may not result in a physical change in consumption patterns. We concluded that the added uncertainty and complexity arising from this proposal will inevitably adversely affect the efficient and economic management of the system."

GDF believed that "contracting for gas reserve in an economic manner in advance may protect the residual balancer from on-the-day exposure to very high prices on difficult days and as such introduce additional efficiencies and reduce the overall costs of system actions. Price stacking of utilisation offers from demand side participants alongside supply side offers on the OCM encourages an efficient and

economic outcome on days where the system balance is tight and provides for a broader range of actions available to the system operator. National Grid NTS will be incentivised to ensure efficient and economic procurement of the gas volumes to be utilised via this mechanism. The additional tool of actions taken as part of a demand side response scheme can help to hedge against supply side failure; for example losing a key storage asset or deliveries from ageing offshore fields. A structured demand management scheme can play a crucial part in avoiding a Gas Deficit Emergency and produce additional flexibility to maintain the supply/demand balance when the system most needs it, particularly where all supply side options have been exhausted or where they are uneconomic. Enabling multi-day offers to be utilised as part of the scheme will remove a barrier to participation from parties who can reduce their demand but only for a longer duration than the gas day. Releasing incremental volumes in this way can help the system over more prolonged period if for example there is a sustained spell of cold weather. Improved visibility of information relating to the volume of demand response contracted for under the scheme can have a number of benefits; it may allow an adjustment to the GBA trigger level and thus reduce unnecessary market volatility."

Prior to stating its concerns, NGNTS reiterated the position on its role of residual system balancer and referred to Ofgem's decisions under Transco's Network Code particularly the approval of Modification Proposals 0710 and 0740.

NGNTS pointed out that if the additional balancing tool were to be used "solely in relation to National Grid's current Residual Balancer role then the objective function of this Proposal is no different to that currently provided for in National Grid's licence terms, incentive structure, and System Management Principle Statement other than introducing the obligation to run a demand side tender regardless of whether or not such tender process was deemed beneficial to the completion of this role. Subject to the points made earlier with regard to the Proposal lacking clarity about exactly what is being purchased, any responses to the tender would be assessed under the same criteria as is currently used in the role of the Residual Balancer. If this is the intent of the Proposal then it does little if anything to build upon the current arrangements since if we considered that running a tender of this nature would result in us completing the Residual Balancing role in a more efficient and economic way then, in response to our current licence conditions and the incentives placed upon us, we would undertake such actions now.

We have not taken such action since we believe that our current residual balancing actions are the most economic and efficient, are in line with our licence incentives and furthermore they also serve to fulfil another relevant objective of securing effective competition between shippers and suppliers by enabling the maximum opportunity for them to manage their own portfolios in order to collectively achieve their primary role of balancing supply and demand and thereby maintaining security of supply.

We do not consider forward contracting for a gas reserve in this manner to be economic and efficient since we would not have the necessary information to complete an efficient assessment of the required volume of contracts and we would

be in the position of a monopoly purchaser for this service. It could therefore be expected that a premium, over and above the equivalent cost incurred by parties within a fully liquid and competitive market, would be likely to be incurred. A premium of ~10% was alluded to during discussions at recent Gas Reserve Working Group meetings and included in the "Above the line analysis: Option 3" paper. Indeed this premium has also been referred to recently in an article entitled "Italian Ministry to release new emergency measures for the next three winters" published in the ESGM (12.110) on 9th June. Gilberto Dialuce, the Gas Director of the Industry Ministry, noted that "tendering with industrial customers and generators for gas did not prove very efficient when it was administered last year by the regulator". He added that, industrial users asked for high prices and the scheme proved "very expensive".

With regard to the Proposer's statement that the Modification Proposal will provide for additional demand side reduction to be brought to the market. National Grid considers that there is nothing to suggest that this situation could not, or will not, be achieved by Users for themselves in a more economic and flexible fashion using current market and incentive mechanisms or indeed that any barriers exist to deter such arrangements. National Grid has consistently supported the development of market arrangements and incentives to encourage active management of supplies and demands by the parties who hold this primary obligation, and continues to consider that this approach is preferable to monopoly intervention as put forward by this Proposal.

We hold some concerns relating to the Proposer's statement that the demand side options contracted for by National Grid would be "in addition" to those already contracted for by Users. These concerns surround the fact that the Proposal does not provide any indication or suggestion as to how this position could be demonstrated or enforced. We consider that the above concerns may be addressed to a degree by an additional UNC Modification Proposal requiring Users to disclose where and what Storage, supply and demand side response contracts they have in place prior to publication of the tender. Such disclosure may facilitate the demonstration of this point and provide some comfort that, by contracting for demand side response, the Residual Balancer was not over-contracting or displacing existing User contracted demand side response and as a result would assist in any demonstration that such contracting was beneficial to the economic and efficient operation of the system. Aggregate publication of the above User information may also serve to promote competition and provide signals for investment and could possibly assist in the identification of "the polluter" as required in the Proposal."

NGUKD noted that "The proposal states that its implementation would establish a contractual framework that would encourage larger volumes of gas to be made available on the OCM by way of demand side sells. At the highest level we agree with this objective and that implementation could encourage greater volumes to be made available. However, we do not believe that implementation would achieve this objective in either an economic or efficient manner."

NGUKD were concerned that the Proposer advocated *“the SO taking demand-side balancing actions at times when shippers should still be active in the market and trying to meet their individual balancing positions. A price spike could result in gas being called off at the same time as the shipper is trying to source gas to meet its demand. Having two parties, independently exerting control of a shipper’s balance position would not result in the most economic or efficient operation of the market. We believe it is not appropriate for the SO to take demand-side actions simply because a pre-described price has been met. SO action at this stage could mean loads being “called-off”, (i.e. interrupted), when in aggregate there could be sufficient gas to meet demand.”*

NGUKD concluded that *“implementation would not be consistent with National Grid’s licence obligation to operate the combined pipe-line system in a coordinated, efficient and economic manner.”*

RWE made reference to the Ofgem decision letter for UNC Modification Proposal 013a where Ofgem noted that *“As a general principle, Ofgem considers that it is a matter for Transco, as SO, to determine the appropriate structure for its contracts for both system and energy balancing, consistent with its obligations to operate the system in an economic, efficient and co-ordinated manner”*. RWE held the view that *“this principle is equally valid now and for the reasons outlined above, we believe that any extension of National Grid Gas NTS’ role would undermine the efficient operation of the market.”*

RWE also believed that *“the changes will blur the clear delineation of balancing roles and responsibilities that currently exist and undermine the efficient operation of the market. Suppliers are working hard to develop demand management products with consumers that respect their individual requirements, and centralised contracting would be economically inefficient and would thwart the development of the market. We believe that it will be more effective to focus on improving demand-side participation in the market rather than diverting demand-side involvement towards a centralised solution”*

SGN believed there was *“considerable merit in the principle behind the proposal. We believe arrangements which provide customers with more time to contract, consider and understand requirements for demand side respons, consider their own capabilities and how they could be managed along with primary business objectives and constraints should be more efficient and have greater certainty of deliverability. Such arrangements should allow customers to better plan and manage services and as a result price more efficiently. As such we believe the proposal could encourage more demand side response and help improve efficiency and security of supply. However it is impossible to fully assess the merits of the proposal without the detail.”*

SP was concerned that *“high marginal process may be set, but at an artificially high level with National Grid effectively “cornering” the market for flexibility (but not necessarily using it) hence having a negative impact on system efficiency. We believe that an efficient market should be compatible with running a secure system, and flexible arrangements for market participants optimise this.”* SP added that it

had *“no confidence that implementing this modification will further the relevant objectives by improving the efficiency of the system. We do not have enough detail on how the scheme will work, how much it will cost, and what impact it will have on existing arrangements, which could have implications for security of supply.”*

SSE was *“supportive of mechanisms to encourage more demand side response. However, the modification lacks sufficient detail and creates concerns over appropriate incentives, cost recovery and sharing of costs. We believe this modification may generate unnecessary costs thereby impacting on efficiency and effectiveness.”*

SSE also stated that *“no evidence had been provided to demonstrate that contracting in advance will encourage incremental demand response additional to that which would have been offered anyway on a real time basis.”* It concluded from this that implementation would *“introduce inefficiencies because it potentially pays customers to reduce demand who on a spot basis would have reduced demand due to high price.”*

STUK did not believe that *“the implementation of this proposal would better facilitate the efficient and economic operation of the pipeline system.”* In support of this, STUK stated that it did not believe that *“NG requires an additional tool to perform its role of residual balancer. NG should remain in the role of residual balancer to reduce the risk of diluting the shipper's primary balancing objective.”*

TGP pointed out that the *“extent to which this proposal furthers the relevant objective is contingent upon whether the level and payment of a capacity/availability fee is considered to be appropriate and whether this delivers appropriate levels of response in excess of that already anticipated or conversely results in no additional response, leading to a general increase in cost levels for pre existing levels of demand response. Additionally it will depend upon whether applying a premium on SMP buy price every day is judged to be consistent with financially incentivising parties to respond appropriately to system conditions on the day.”* TGP suspected *“on the latter point it isn't and may lead to potentially significant unintended consequences.”*

In relation to:

“(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 other relevant gas transporters;”

Referring to the problems it highlighted in sub-paragraph (a) above, EON believed that these would be further exacerbated *“where distribution network operators inevitably need to be involved in the communication chain to ascertain whether or not a demand side response has or has not taken place.”*

NGNTS stated that *“subject to the chosen interpretation of the objective function of entering such demand side contracts (and what is to be purchased by such contracts), it could be considered that this Proposal does not change, or therefore enhance, the efficient and economic operation of the system. Indeed it could be argued that the Proposal's only effect in this area is to introduce an obligation to*

complete a tender for demand side response. Should such tender only result in offers being submitted which are considered to be less efficient or economic than delaying residual balancing actions until the requirement for such action is more clear, then it could be argued that placing an obligation to run such a tender, rather than the current situation of having the option to run such a tender, could in itself be inefficient and uneconomic."

In relation to:

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

EDFE believed that implementation would "provide NG with an extra balancing tool with which to discharge its residual balancer role and could ultimately avoid entering a Gas Balancing Alert this winter or worse, a potential Gas Deficit Emergency."

NGNTS pointed out that its SMPS "currently does not preclude us from instigating tenders such as those described in this Proposal and therefore this Proposal does not further this objective. Indeed as detailed above, in obliging us to complete such a tender the Proposal may be detrimental to this objective."

In relation to:

"(d) so far as is consistent with sub-paragraphs (a) to (c) the securing of effective competition:

(i) between relevant shippers;"

The Proposer suggested that this relevant objective would be better facilitated "by introducing a wider range of contracts available to daily metered customers and reducing current barriers in the market to demand side participation," and argued that this would also facilitate the securing of effective competition between relevant suppliers.

APX noted that "The principles behind the current cash out methodology are that all shippers should have sight of gas prices on the day together with the balancing actions taken by NGG. This information is provided by the OCM. The availability, transparency and timeliness of this information allows shippers to make balancing decisions based upon robust price signals. We believe that Modification 0086 compromises these principles because those shippers who receive an instruction from NGG under their gas reserve contracts will have sight of an NGG action ahead of the rest of the market. This may create an incentive for those shippers with this knowledge to withhold supply in the expectation of price increases. This would clearly be an unintended and undesirable consequence of the Modification."

CIA pointed out that, as a result of implementation, consumers "would be 'bidding' to provide a demand side response, and so would be competing with each other to provide this service. This modification would further

introduce an incentive on shippers to introduce new and innovative contracts, securing further competition between shippers/suppliers."

EDFE pointed out that the ability for shippers to contract for and supply DSR to NG would "ultimately depend on existing portfolios and the flexibility of current structured supply contracts. However, this proposal will provide system prices to signal DSR costs ahead of time whilst providing a route to market for different types of consumers via their shipper. For example, smaller I&C consumers, who find it difficult to provide their gas to market and ultimately self interrupt during periods of high prices, can now participate in DSR via an aggregation service that a shipper may want to provide."

GDF stated that "Targeting the costs of the scheme into the System Marginal Buy Price further strengthens the incentive for shippers to balance. Any shippers who are short of gas will pay SMP buy including the cost of demand side availability, and utilisation where actions have been taken. This re-enforces the "polluter pays" principle of cash-out pricing by ensuring that the economic value of demand side actions are properly targeted. Gaz de France ESS has proposed that participation in any scheme is voluntary therefore enhancing the range of contracts available to customers. We have witnessed this through our experience in the electricity market, where formal demand side arrangements have been in place and operated successfully for many years. Here, we have operated commercial arrangements alongside National Grid administered schemes successfully for many years and we envisage the same success on gas. Specifically, those parties who want to be available to help the system on difficult days only, can do so under the scheme but this should not inhibit commercial terms. Those parties who wish to benefit from commercial interruption arrangements can continue to do so either alongside or instead of a National Grid tender scheme.

NGNTS did not "consider that there are currently barriers to participation in the market by Daily Metered customers. Users and suppliers are, currently, entirely at liberty to develop these contracts and offer them to their customers without the need for intervention by the gas Transporter and therefore we do not consider that the barriers referred to above actually exist or if they do, no one has demonstrated the existence. Furthermore the multiple player market is far better placed to offer the varied and flexible contract terms, often required by consumers, than any monopoly buyer is likely to be.

Monopoly Transporter intervention, as described in this Proposal, would serve to restrict the market's access to this demand-side response as it would effectively be "reserved" for the Residual Balancer's use only. Such a situation is clearly comparable to the restriction of storage gas from the market under the old Top Up counter-nomination process." NGNTS referred to Ofgem's decision letter 0710 in support of this argument.

NGNTS also stated that *“since any gas reserve contracts envisaged by this Proposal are required to be undertaken via a User, associated with the end consumer, this Proposal does not address any perceived barriers, real or otherwise, to participation by the end consumer in the demand side market. The Proposal (and indeed the Gas Act) requires the contractual relationship to be between National Grid and a User. Users/Suppliers would then contract with consumers. National Grid is not sure what advantage would be gained by our involvement in this transaction that could not already be achieved.”*

NGUKD believed *“the implementation of this proposal could give rise to cross subsidies between market-sectors as the cost of funding the availability fees would be smeared across all gas customers. This would result in a considerable element being picked up by domestic customers. Many of the supply points that would be targeted as candidates for this arrangement already receive considerable transportation charge benefits as they are classed as interruptible, (and consequently may be interrupted by the transporter for capacity management purposes), by the transporter.*

Where interruption convey balancing benefits, any further price inducements offered to the gas customer to interrupt should be fully funded by the shipper as it is the contract between the gas customer and the supplier that should define the supply terms and crystallize supply costs and risk. If the shipper requires additional interruption to balance then that should be established in the supply arrangements and the industry should not be looking to an availability scheme centrally administered by the SO and funded by smearing costs across all gas customers. NTS should not carry the responsibility for supply / demand interruption happens simply because suppliers are unable to strike the necessary deals.”

RWE outlined the current incentives on shippers to balance and noted that *“Shippers require access to flexibility to manage their position and demand-side contracts represent one possible source of this flexibility. We believe that it is consistent with the division of roles and responsibilities that shippers rather than National Grid Gas NTS are able to work directly with consumers to develop demand flexibility”. It expressed concern that “if National Grid Gas NTS does gain access to this source of flexibility, it may weaken incentives on shippers to enter into demand-side contracts and may increase the costs faced by shippers in competing with National Grid Gas NTS for the same volume of demand-side response. Ultimately, we see costs to consumers rising as a consequence.”* RWE also perceived the risk that *“gas reserves procured by National Grid Gas NTS will displace the demand-side response that can be offered by shippers via the OCM. This will force those affected shippers to purchase alternative sources of flexibility, potentially at higher cost.”*

In addressing the Proposer's point that implementation would *“remove barriers to entry,”* SGD assumed the implication behind the Proposal *“was that under the current arrangements shippers are unwilling or unable to*

identify and capture the total volume of available demand-side response." In disagreeing with this implication, SGD pointed out that it maintained "a highly flexible contractual approach and ample proof of this is the response of our portfolio to the GBA of March 13th."

Under this heading, STUK believed that "the implementation of a Gas Reserve market will undermine any contractual arrangements and innovations already put in place by shippers and suppliers. It is unclear what additional demand side volumes would be made available as a result of the implementation of this proposal as customers that are on daily priced gas supply contracts will still not have title to the gas to sell back to NG if called upon to do so, and those customers which have fixed volumes are already incentivised to enter into demand side arrangements with their shippers by the risk of being switched of with no compensation should we enter into an emergency."

"(ii) between relevant suppliers;"

The Proposer and several respondents associated both shippers and suppliers with their statements summarised above.

In addition, BGT believed that "Gas Reserve tenders would be a very large additional cost to suppliers that would eventually have to be passed on to consumers. It is likely that the SO will be offered 'reserve' at high prices and with upfront availability fees that will mean that the 'service' will incur a cost whether used or not. The 'service' is likely to be that which would have been available on the day if needed, i.e. Users (and their customers) will be paying for a demand-side response that would have been available anyway. This would be particularly so where the SO were not be incentivised to minimise the costs of Reserve."

"(iii) between DN operators (who have entered into transportation arrangements with other relevant gas transporters) and relevant shippers;"

The Proposer made no specific comment.

EON believed that implementation of this Proposal would cause "significant (multi millions of pounds) of financial redistribution between shippers and will thus profoundly affect competition between shippers and suppliers. Implementing this at short notice would simply advantage particular market participants at the expense of others. Disadvantaged parties would not have time to adjust their competitive positions ready for next winter, thus advantaged parties would make 'windfall' gains."

EON justified this statement by pointing out that under the "current gas regime demand side response is essentially a tool to allow shippers to manage their own energy balance position, and thereby avoid potentially high imbalance cash-out prices in the event 'short' positions. Given the usefulness of this tool to shippers, why on earth would they wish to offer a fixed price exercise value at anything other than a very high price, bearing in mind there is theoretically no limit to the level of the system marginal buy

price. One would expect prices to escalate rapidly ahead of a possible gas emergency.

Some shippers may be willing however, to offer more 'favourable' terms to NG under a gas reserve tender.

- (a) shippers that have no intention of honouring reserve contracts should imbalance prices become so prohibitively expensive that they exceed the exercise prices. Under such a situation such parties may simply choose to exit the market and no physical demand side response will result from NG exercising such contracts.*
- (b) shippers whose customer portfolio is made up of mainly of large I&C customers who can provide demand side response, in which case their metered offtakes from the system would be low thereby avoiding most of the huge smearing costs they have 'caused' as a result of the exercise of theirs and others gas reserve contracts.*

The key issue here is whether it is right for the 'opportunistic' actions of a few shippers (some of whom may make promises that they may not be able to fulfil to secure lucrative option fees) and place this cost burden on other shippers. We consider that this disproportionate cost burden arising from gas reserve contracts will inevitably have to be reflected in prices to smaller customers.

In addition, given that that contract for gas reserve is struck between NG and a shipper rather than a direct contract between NG and the customer it is also unclear to what extent the income from the option and exercise will actually be passed through to customers.

The gas reserve proposals may ensure large I&C customers receive higher payments for demand side response at the expense of smaller customers; however the real winners are particular shippers who are in business for short term gain or happen to serve particular customer groups.

It is also difficult to understand why these gas reserve contracts are linked solely to demand side flexibility especially as it appears that the modification proposal is little more than a paper 'title' transaction at the NBP. Storage flexibility, swing and increased interconnector flows all represent alternative forms of upward flexibility - why are these not part of gas reserve arrangements. To not include these is surely discriminatory.

It is important to remember of course that we have already have a reliable and effective route to market for all forms of flexibility. It is called the on the day commodity market. This direct simple to use mechanism, allows upward flexibility (including demand side) to be offered by shippers to the market at short-notice, at prices that reflect short-term supply-demand fundamentals. Balancing actions are even reflected in cash-out prices immediately. These are all feature that one might theoretically want form a market mechanism. Why are we wasting time inventing yet another balancing tool for NG especially one which has less utility than the OCM."

In relation to:

"(e) so far as is consistent with sub-paragraphs (a) to (d), the provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards (within the meaning of paragraph 4 of standard condition 32A (Security of Supply - Domestic Customers) of the standard conditions of Gas Suppliers' licences) are satisfied as respects the availability of gas to their domestic customers;"

The Proposer suggested that this relevant objective would be better facilitated by adding additional security of demand side response over and above storage safety monitors and reducing the likelihood of any emergency escalating to stage 3 firm load shedding.

The CIA did not believe that *"demand side response should be a routine feature of the gas market. The business plan of our member companies is to manufacture chemicals and service customers safely and reliably. They should not be required to curtail production as a regular means of protecting gas supply to the domestic sector."*

The CIA was also concerned that the *"implementation of this modification may reduce the incentive on shippers to procure demand side response. However the CIA believes that the incentive provided by the current cash out regime will ensure that shippers continue to ensure that they can balance their position."*

EDFE believed *"this modification has the potential to create an extra level of system security, albeit at a price, which should ensure that shippers are economically incentivised to supply gas during periods of tight system balances to protect domestic consumers."*

EON considered that implementation would dilute *"shipper incentives to balance which may ultimately threaten domestic customer supply security standards."* EON summarised other relevant approved Network Code Modifications and concluded that implementation of this Proposal would run *"contrary to the rationale unpinning all of these previous proposals."*

EON expressed the view that *"the current roles of shippers who are collectively responsible for energy balancing and NG as residual balancer are clear and well understood. Introduction of this modification will extend NG's role and it would become uncertain as to who is ultimately responsible for securing demand side response."*

EON referred to the fact that shippers were *"striving hard to offer a range of demand side products"* and suggested that a *"one size fits all' approach determined by NG may condition the market into one form of demand side response contract rather than allowing the market (i.e. shippers) to develop a range of innovative options for energy buyers."*

GDF stated that implementation, by removing barriers for demand side participation, would bring forward *"additional volumes that may not otherwise have been seen on a voluntary basis ahead of emergency interruption in stage 1 (interruptible) and stage 3 (firm load shedding) of a Gas Deficit Emergency."*

Bringing forward such volumes decreases the likelihood of escalation into an emergency and as such acts as an additional buffer to protect storage monitors and help prevent curtailment of storage flows, thus protecting security of supply for domestic customers."

NGNTS considered that implementation *"might have the unintended consequence of weakening incentives on Users in this respect. National Grid consider there is a real risk that this Proposal is seeking to extend the Residual Balancer role towards contracting for demand side response to manage the longer term "duration" balance of the system i.e. , as stated in the Proposal, the "avoidance of a Gas Deficit Emergency" Safety Monitor breach. We are concerned that such an extension could result in National Grid being drawn into an ever widening role in regard to the provision of security of supply. For example, as we secure contracts for a reduction in demand, Users might then adjust their supply contract positions by an equal, or greater, amount to reflect their perception of a reduced security risk as a result of the National Grid "insurance policy". This could then impact upon the volumes delivered at the 'beach' and incentives to provide storage capability or other forms of flexibility. In this way the role of Users in supply/demand balancing would be reduced and National Grid may be drawn into an increasing cycle of contracting for demand side reduction in order to affect a "duration" security of supply system balance.*

Addressing the argument that implementation would reduce the recourse to "firm load shedding", NGNTS stated that this would not be the case. NGNTS stated it was clear that *"going into any winter period the amount of available supply over that winter period is fixed. For this supply to be able to meet demand, demand must be managed to the point where it is equal to or less than potential supply. Whether such "firm load shedding" is the result of a stage three process or through pre-arranged demand-side contracts does not change the fundamental equation of the volume of demand-side management required."*

In relation to:

"(f) so far as is consistent with sub-paragraphs (a) to (e), the promotion of efficiency in the implementation and administration of the network code and/or the uniform network code."

EON expressed the view that the Proposal was inadequately defined and that *"all key commercial rules affecting the relationships between shippers and transporters should be set out in the UNC. By failing to adequately define the detailed tender process, under what circumstances NG should exercise such contracts, how cash-out prices will be affected and from whom the costs should be recovered, these will either have to be clarified through subsequent modifications or defined in non-code documents. The former is inefficient and the later extremely poor governance as this would limit the future ability of market participants to propose changes to commercial terms for gas reserve arrangements."*

SGN noted that *"the Proposer has stated that further development is required and has suggested that this could be undertaken in parallel with progression of the proposal. We are not clear what aspects would be developed further, or the*

timescales for carrying out such work. We are also unclear how this would be taken forward under current governance arrangements and Modification Rules. Given these concerns, we can not support implementation of the proposal as it stands."

SGN also stated that "The Proposer states that much of the detail of the tender scheme is outside the scope of this Modification Proposal. The Proposer states that the terms would be developed in conjunction with Users and potential participants. It has been suggested that the tender process would be defined by National Grid NTS but "informed by industry feedback". We are not clear how or when this would take place. We do not believe this process is in keeping with current governance arrangements or the Modification Rules. The UNC is a contractual document. Operational arrangements and obligations must be clearly defined and consulted upon to ensure all market participants, particularly parties to the UNC, have an opportunity to fully assess any impact and comment on arrangements. Without following such a process it is difficult to accurately assess whether proposals better facilitate relevant objectives. Also arrangements must be clearly defined to ensure appropriate legal text can be developed which accurately reflects the proposal and which can be incorporated into the UNC."

SSE expressed the view that the "process for determining the reserve volume and duration is not clear. We are uncomfortable that this is entirely at the discretion of NGG. It would have been preferable that during the consultation period this important information was made known in addition to information regarding how this scheme would operate. In particular we are concerned about the level of potential costs that might arise from the reserve contracts."

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

By raising this Proposal, the Proposer sought to "offer a more centrally coordinated route for utilisation of the affected gas volumes in an effort to maintain security of gas supplies." The Proposer believes that "the Modification Proposal is critical to assist with Security of Supply for the UK gas market" and that this Modification Proposal "would help to hedge against the uncertainty of supply side delivery and provide an additional tool to maintain Security of Supply."

AEP noted that the Proposal "indicates that an incentive is created for investment in fuel switching and contracting for alternative fuel. We challenge whether this proposal itself creates those conditions or whether they are a feature of the tight supply demand conditions this coming winter with the proposal and any availability payment only having a marginal effect."

CIA understood that implementation of this Proposal "would enable National Grid to take actions in order to avoid a potential gas emergency, which would be beneficial for security of supply." Further, CIA noted that "this will provide an additional route to market for demand side response, thereby positively impacting security of supply."

EON expressed the view that implementation of this Proposal would dilute a shipper's "primary responsibility for energy balancing and as such it undermines shippers focus on

demand side response. Even the consideration of this proposal is hindering demand side contract negotiations between shippers and customers, as customers await Ofgem's decision on this proposal."

EON then identified the possibility of National Grid NTS agreeing sizeable forward option contracts with shippers and stated the view that *"this could significantly distort the market and have serious FSA implications for NG as they move beyond their current residual balancing role."* and pointed out that the degree of intervention required was not clearly stated within this Proposal.

EON then addressed contracts envisaged within this Proposal and reserve contracts in electricity. It considered that such comparisons were flawed *"as in electricity NG contracts directly with an end-user and can directly measure the actual demand side response. Such arrangements are necessary to maintain the 'quality' of electricity or give time for bid-offer acceptances (BOAs) to be effected. Operating margins in gas fulfils the equivalent later function in gas giving time for shippers to respond to OCM actions."* EON pointed out that *"reserve arrangements in both gas and electricity are intended to provide tools for the residual balancer NG, to satisfy short duration, near term physical requirements. These are not major forward positions in the market."*

Depending on how option prices and exercise prices impact cash-out prices (the proposal is unclear in this respect) will affect the speed and nature of the market response. In the gas market cash-out prices are determined on a 'real-time' basis and any rapid escalation of prices ahead of a possible gas emergency will be quickly reflected in cash-out prices. Ex post adjustments and over-complication will inevitably weaken the immediacy and relevance of the cash-out price signal.

Worse still, the fixed exercise fee may place, albeit temporarily, an 'artificial' ceiling on cash-out prices, thereby weaken the pricing signal (i.e. incentives to balance) in the critical phase ahead of a possible gas emergency."

EON concluded from this that *"hiving-off market rules in to non-code documents will inevitably lead to industry fragmentation. This may ultimately threaten security of supply and safety of the system."*

GDF believed that implementation *"would enhance security of supply to UK customers for winter 2006/7 and subsequent winters. Implementation of this modification proposal the potential to help alleviate concerns over supply/demand balance on peak days and decrease the likelihood of progressing into a Gas Deficit Emergency. We believe that this modification will bring forward voluntary demand reduction in a managed and structured way ahead of involuntary demand curtailment for the Industrial and Commercial community in stages 1 to 3 of an emergency."*

GDF also stated the belief that the *"pronounced delay effect that we have illustrated represents a significant defect in the current arrangements, which needs to be addressed ahead of the coming winter. In light of the experience of the previous winter, including the first Gas Balancing Alert (13 March 2006), and the forecast of a tighter winter ahead by National Grid, such arrangements need to be in place as a matter of urgency. Improved demand response from Industrial and Commercial customers is complementary to that of CCGTs and can help to balance the burden of demand response to help ensure that*

security of supply in electricity is maintained via adequate plant margins, in the event that here are simultaneous problems with electricity and gas supplies."

NGNTS was of the viewpoint that *"this Proposal is not required for the furtherance of Security of Supply to domestic end consumers, furthermore National Grid considers that this Proposal might have certain unintended adverse consequences for Security of Supply.*

- *National Grid is aware of anecdotal evidence suggesting that, uncertainty caused by the current ongoing debate around the issues raised in this Modification Proposal, has at least delayed and at worst may have prevented Users and end consumers, putting in place the commercial interruption contractual arrangements needed for winter 2006/07. We are therefore concerned that the existence of this Proposal, irrespective of whether it is implemented or not, has caused a significant degree of uncertainty throughout the industry that could have a detrimental impact on the Security of Supply position for winter 2006/07.*
- *We consider that implementation of this Proposal might have the unintended consequence of weakening incentives on Users for the provision of security of supply. We consider there is a real risk that this Proposal is seeking to extend our role towards contracting for demand side response to manage the longer term "duration" balance of the system i.e. the "avoidance of a Gas Deficit Emergency" Safety Monitor breach. We are concerned that such an extension could result in National Grid being drawn into an ever widening role in regard to the provision of security of supply. For example, as we secure contracts for a reduction in demand, Users might then adjust their supply contract positions by an equal, or greater, amount to reflect their perception of a reduced security risk as a result of the National Grid "insurance policy". This could then impact upon the volumes delivered at the 'beach' and incentives to provide storage capability. In this way the role of Users in supply/demand balancing would be reduced and National Grid may be drawn into an increasing cycle of contracting for demand side reduction in order to affect a "duration" security of supply system balance.*

Introducing "obligations" or "expectations" on National Grid to contract for demand side management were it is clear from information supplied by the industry as a whole that some level of demand side response will be required if the coming winter period is severe may appear a logical safety net or community insurance policy for the industry. As such this should not be dismissed if all parties are aware of this "obligation", the extent and nature of the "obligation" is clearly defined and agreed by all parties and National Grid is suitably funded for completing this task. However, such a step is a significant departure from the previous drive towards a minimal Residual Balancer role and reliance on market forces and commercial incentives to deliver security of supply.

Changing one industry party's role in isolation will not be sufficient as no one party has control over all the factors (beach supplies, storage booking and utilisation, demand management etc) which come together to maintain security of supply over a winter period. Therefore changing just one party's role risks introducing, asymmetry in the market, uncertainty and duplication of effort and therefore the introduction of uneconomic and or inefficiently incurred costs.

Our involvement in the Ofgem chaired Gas Reserve Working Group meetings and with the Proposer demonstrates that we are committed to addressing the issue of supply security as the GB market moves towards a greater gas import dependency. With this in mind we consider that if securing supplies or compensatory payments to consumers above and beyond that already provided for through the Storage Safety Monitors is an objective that the industry feels is appropriate then the roles and responsibilities of all parties should be changed in unison in order to mitigate the risks identified above and provide a clear direction for the industry going forward.

- *There is potentially a further unintended consequence of this scheme. The Proposal does not make clear the details of the transaction between the User and National Grid (not least of which is whether or not title to gas is transferred). However, whilst not detailed in the text of the Proposal, at the Transmission Workstream on 1st June 2006, the Proposer stated that the intension of the Proposal is that the User would be required to deliver on any such contracts with National Grid regardless of whether or not they were still contracted with the end consumer. Such a statement would seem to dictate that such transactions would be non locational actions from the User to the Residual Balancer at the NBP only. It is therefore a little confusing why the Proposal then goes on to reference User Nominations at a System Exit Point as a means of calculating the volumes called under the contracts since if the User is no longer registered at an Exit Point then it does not have the ability to nominate at that Exit Point.*

If the Proposal does intend that the contract should have a physical delivery element or link to an offtake's consumption then it would be necessary to consider the situation were the time delay between contract signing and delivery has resulted in the end consumer changing their User. It would also be necessary to reconsider the volume calculation for Day two and beyond under the contract for the same reasons as recently given by National Grid in our response in relation to Modification Proposal 0054a as the Proposal's current reliance on Nominations may be inappropriate for Day two.

The Proposer confirmed at the UNC Transmission Workstream meeting that transactions would result in the User's imbalance position being adjusted via an 'ECQ' type methodology. However this stated requirement has not been included in the text of the Proposal. If this is to be the intension of the Proposer then in this case the User would still be incentivised to deliver the originally intended supply quantity to the system. If the User's original intention had been to deliver this quantity of gas to the System from storage stocks then it is most likely that it will continue to do so to meet this trade obligation regardless as to whether the demand has turned down/off. Under this scenario there is a risk that the execution of the proposed demand side reduction contracts will not achieve the stated intension of "avoidance of a Gas Deficit Emergency".

- *A further potential unintended consequence of this Proposal (if the title to gas trade is included) relates to the fate of the gas purchased by the Residual Balancer under the demand side contracts under a security of supply scenario. When the Residual Balancer purchases demand side reduction through a balancing action from a User*

the effect is to change that User's imbalance, by moving title to the gas to the "system", which the User will be incentivised to try and correct by delivering on the trade i.e. maintaining its intended supplies to the system whilst reducing its demand. If such contracts are used for the avoidance of a Gas Deficit (Safety Monitor Breach) Emergency, as indicated in the Proposal, there is a realistic scenario whereby execution of the demand side contracts transfer title to gas sufficiently to result in system linepack increasing to a level where a Residual Balancer sell action is required to maintain the safe operation of the Total System. The impact of this could be to reduce system prices to a level where other, User interrupted, offtakes are encouraged to increase their demand. The net result of executing demand side contracts in the manner suggested in the Proposal could therefore be a seesawing effect on the system linepack, increased Residual Balancing actions and increased price volatility rather than an avoidance of a Gas Deficit Emergency. As such the Proposal does not achieve its stated purpose."

SGD referred to the industry meetings where the Proposer had *"been unable to explain why NGG NTS would be more successful than shippers in contracting for demand-side response. Moreover, this proposal does not give any degree of clarity as to how volumes contracted for by NGG NTS could be differentiated from existing commercially contracted volumes."*

SGD assumed from this that implementation would not *"result in an increase in the overall volume of demand-side response. Rather, it is probable that it will represent an opportunity for some shippers to bid in their present volumes of demand-side response and use this proposal to recover their existing costs via the availability and utilisation payments envisaged by 0086."* However SGD still concluded that *"there may nonetheless be some merit in the proposal within the context of this forthcoming winter. Winter 2006/07 will be tight and the availability and use of demand-side response will assume an increased importance in relation to avoiding an emergency situation. It is vital that whatever volumes of demand-side response are available, they are used in the most efficient manner and on the basis of the most up-to-date supply / demand balance."*

SGN suggested that any attempt to *"implement this proposal as it stands, developing detail outwith the normal process, would only add to current uncertainty regarding demand side response and would not better facilitate relevant objectives or security of supply."*

STUK believed that this proposal *"creates significant risks to the shippers involved. Firstly the adverse effect on the System Marginal Buy Price on peak days created by this proposal will have an effect on the cash out exposure of shippers and the possibility of delays in the real time calculation of SMP buy will distort the way shippers will react to price. Secondly if a gas reserve contract is entered into by a shipper on behalf of a user who then subsequently changes supplier during the life of the reserve contract, (which is likely as the recognised annual contract renewal date is 1st October), the shipper will be forced to find these volumes in the market in the event that the reserve volumes are required by National Grid, exposing shippers to high prices. This could also create additional demand on an already stressed system."*

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

a) implications for operation of the System:

CIA believed that implementation of this Proposal would provide National Grid NTS *"with an additional tool for balancing the system and avoiding an emergency."*

EDFE believed implementation would *"only impact NG NTS as they are responsible for system balancing. We also believe this proposal will help improve the economic signals for guaranteeing Security of Supply and that it fits well with NG's role as residual system Balancer."*

EDFE also noted that *"two years ago NG proposed modifications 0584 and 0585 (Transco Network Code Modification 0584: "Provision of Contestable Transmission Support Services" and Modification 0585: "Provision of Contestable System Reserve Services") which would have gone further than this current proposal and allowed NG to contract directly with demand-side response. These proposals came at a time when NG appeared to be stressing its residual balancing role. If NG do not agree to the implementation of this modification it will be helpful for us to fully understand why NG has changed its position in this matter."*

The SME has sought a response to the above from National Grid NTS. Their response is as follows: *"The two Modification Proposals referred to in the EdF response (0584 and 0585) were both withdrawn by National Grid following discussion with Users in the relevant workstream. Both Proposals also sought to affect the way in which Transco undertook its primary obligation to provide Transportation Capability. 0086 relates not to the provision and management of Transportation Capability (the primary role for National Grid) but rather it refers to the balancing of supply and demand (the primary role of the shipper (User)) as such National Grid's position has not changed."*

It should also be noted that National Grid is not able to contract directly with end consumers for energy management purposes as such contracts are prohibited under the Gas Act 1986."

NGNTS pointed out that the Proposal *"does not clearly state what it is that National Grid would be buying in any such contracts. The question remains as to whether we would be buying an action from the User to turn down a specific supply point, or buying title to gas."*

NGNTS referred to its assessment of the implications of Modification Proposal 0086 on the Transmission System Management Principles Statement (SMPS) and the Procurement Guidelines (PGs). It stated that the existing SMPS and the PGs *"provide National Grid with the opportunity to utilise various tools to manage (i.e. balance) the Total System in an economic and efficient manner, including (but not limited to) the use of tenders, forwards and options. National Grid has identified several changes to the SMPS that would be required should the Authority direct the implementation of 0086 and are based on an understanding of the Proposal. These changes have been communicated separately to the community."*

NGTS believed that *"the Proposal is insufficiently clear in a number of areas including the objective function of any proposed tender process to allow an accurate assessment of impacts in this area. One view of the Proposal would suggest that the role and Objectives of*

the Residual Balancer are not affected by this Proposal. In such case, we believe the Proposal adds nothing to the operation of the System that is not currently available. Another view is that the Proposal seeks the “avoidance of a Gas Deficit Emergency”. This could mean the avoidance of a Safety Monitor Breach. Such an interpretation would have profound and far reaching implications for the operation of System and the role of the Residual Balancer.”

NGNTS added that *“Subject to the interpretation of the Proposal as being that these contracts should be used on days as and when required by the Residual Balancer i.e. not being restricted to those days where a GBA is in force, and on the understanding that there could be consequent effects on the cashout and price determination for these days of using these contracts, then the following changes may be applicable;*

SMPS - Part C, Section 3.1 National Requirement

- 1. Clarification that the primary system management tools are the OCM and where appropriate, OTC trades.*
- 2. Remove the dependency for OTC trades to be taken only in the event of a GBA, and, as an Eligible Balancing Action – thus extending the potential for the Residual Balancer to complete OTC trading to all time periods where it considered such trades to be efficient and economic.”*

NGUKD pointed out that the demand side response envisaged by the Proposer *“would have to be delivered through demonstrable supply point interruption whereas now demand side response, in the same way as supply side response, is a matter for the shipper’s balance.”*

NGUKD also pointed out that this proposal *“requires the SO to pre-contract for interruption, which could be called using OCM price triggers. Presumably, where the SO takes an eligible demand side action, the instruction would be first conveyed to the shipper and then subsequently an instruction to interrupt (at [x] hour’s notice) would be passed to the gas customer. A successful instruction would result in that shipper’s demand being reduced as a result of the nominated supply point reducing its offtake; the shipper would not be able to maintain its balance simply by increasing its supply side deliveries. Partial and within day interruption has always been difficult to monitor, although no doubt this could be resolved with the introduction of real time metering arrangement by the shipper. We understand that the shipper would validate compliance and confirm the volume delivered through the bilateral agreement.”*

RWE noted that *“The proposal also introduces complex contractual arrangements between National Grid Gas NTS, shippers and end-users. It is unclear where the contractual obligation to ensure physical delivery of the contracted volumes actually sits as National Grid Gas NTS will not have a direct contractual relationship with the customer. The position is even less clear where a customer changes shipper midway through its gas reserve contract and whether the obligation moves with the customer or remains with the original shipper. It is envisaged that the gas reserve volumes could be contracted to both the shipper and National Grid Gas NTS. In such circumstances, customers may be reluctant to offer demand response to their shipper in case National Grid Gas NTS calls it. This may exacerbate the position and, if it does not bring forward the gas emergency it may lead to high prices. Far from removing barriers to entry for I&C consumers providing a route to*

market, we believe there is a real danger that this proposal will confuse and complicate existing market participant arrangements that have developed over time and are well understood. We are also confused as to how the "demand volume reductions are expected to be calculated as the proposal seems to imply this is determined based on a site's nomination on the day. This suggests that National Grid Gas NTS may not know how much of any reserve they have contracted for will actually be available to them until the day it is needed, and creates potential gaming opportunities for end users."

SGN pointed out that the Proposal was unclear on *"whether this is an NTS only arrangement or whether it is also applicable to customers connected to DNs. Assuming it would also be applicable to customers connected to the DNit is not clear how this would sit with proposals for DN interruption reform."*

SSE stated that implementation would *"make NGG the balancer of first resort rather than last resort as is currently the case. SSE do not believe it is appropriate that NGG should become a balancer of first resort, market based principles incentivise shippers and suppliers to balance supply and demand. In addition, SSE are concerned that if NGG were to become a balancer of first resort they may 'crowd out' the developing market for demand side response and have an unfair advantage over shippers trying to offer the same service to customers."*

b) development and capital cost and operating cost implications:

The Proposer has identified two type of costs: "Availability Payments" associated with Users making the demand side response available for the System Operator whether that gas is utilised or not and "Utilisation Payments" which are payable when demand side response is exercised by the System Operator. Based on National Grid NTS contracting for demand side response required for a 1 in 10 severe winter, the Proposer has identified, from a recently published National Grid NTS document, Availability Payment costs of between £12.9m and £47.3m. The Proposer has not identified any specific costs in respect of the Utilisation Payment.

NGNTS reiterated that *"the Proposal is insufficiently clear in a number of areas including the objective function of any proposed tender process and contract execution to allow an accurate assessment of impacts in this area."*

RWE referred to this payment structure and believed that *"these contractual arrangements could be offered by shippers if valued by customers. Npower has discussed these options with customers at Ofgem's series of Options for Energy Buyers seminars. As described, contracted gas reserve will be deployed in price order and may set the SMP buy price on a day. In essence, this just replicates the arrangements that are currently in place, and supports our argument that the gas could be offered into the OCM by a shipper. All this modification proposal appears to add is the introduction of uplift to the SMP buy price to recover availability payments."*

SGN questioned what were *"the overall cost and benefits associated with this proposal?"*

SSE characterised these costs as *"significant"* and pointed out they were *"not currently incurred and may not be required in future years, but would nevertheless be paid for in advance for each subsequent year if this modification was approved."*

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

The Proposer has suggested that the costs associated with the Availability Payment be included in the cost calculation for System Marginal Buy Price on a flat daily basis spread over 365 days. It is proposed that a Utilisation Fee is paid to participants in the event they are called upon to provide demand response. The Utilisation Fee would be based upon the volume made available at the time of the instruction. “Where a System Balancing Action has been taken by National Grid NTS under the scheme the Utilisation Price, may where it is the highest price, set the System Marginal Buy Price on the applicable day.”

APX noted that “The OCM provides real time system prices to the market Modification 0086 proposes alterations to the way the cashout prices are derived, by including an Availability Payment and a Utilisation Payment it is envisaged that the Utilisation Price could set the System Marginal Buy Price for the day. We believe that the price of the marginal therm on the system should set the SMP but we believe that the inclusion of an Availability Payment will not only distort price signals but could artificially inflate the value of Gas Demand Management, in other words customer interruption, and therefore making it less likely to be called.”

The CIA noted “that demand side response is required in order to protect the domestic sector, and those who cannot be isolated from the system. It may therefore be appropriate for the costs to be recovered from those who would benefit from demand side response, based on the “polluter pays” principle.”

NGNTS pointed out that the Proposal “requires that any Availability Costs are fed through to the SMPbuy price. This concept is a departure from the current regime structure since SMPbuy is currently only used as a means to set a System Clearing price i.e. balancing incentives and is not currently a cost recovery mechanism.” NGNTS were also unclear on “what the Proposer had in mind by requiring that these availability costs are targeted on the “polluter pays principle”. Our interpretation of this is that the term ‘polluter’ in this instance is directed towards User(s) that have a negative imbalance position following the ‘after the day’ allocation processes . This would seem to be potentially unfair because the proportion of the availability cost picked up by an individual User would depend not only on the User’s own imbalance position at the end of the Gas Day rather than at the time that the action was taken but also the imbalance position of all other Users.” NGNTS demonstrated this with a worked example.

NGNTS then pointed out that whilst “the recovery of costs in the way required by the Proposal could be made to work by the retrospective price adjustments shown above, the consequences of amending individual User cashout prices in this way are potentially far reaching. Firstly any visibility of the User’s applicable SMPbuy price, within the day, would be lost. Users would not therefore know their exposure to imbalance positions until sometime after the day in question.” Secondly, NGNTS acknowledged that the availability charge used in its example were relatively modest and pointed out that “depending upon the volume of gas from Demand Response that National Grid is required to secure, the daily cost could be significantly higher.” NGNTS drew attention to the document it had published at the request of the Gas Reserve Working Group and pointed out that based on the parameters defined by Ofgem, the daily availability costs could be £935 million or

approximately £5.2m per day. It concluded *“focusing these type of costs on “short” Users alone would have a significant effect on User solvency.”* Finally, on this point, NGNTS pointed out that *“since the availability costs are incurred everyday (including days where the Total System is balanced or long on gas) it is entirely feasible that no User is actually “short” at the end of the day. The Proposal does not explain how availability costs should be recovered in this event i.e. where there is no identifiable polluter. Do the costs rollover to the next day or are these costs then smeared between the non polluters? In our view the Proposal can not be implemented until such time as this question is answered and fully consulted upon by the industry.”*

NGNTS suggested that the *“responsibility for ensuring that the goods sold to a consumer are actually delivered to the consumer rests, in the gas market as in any other market, with the party who sold those goods to the consumer.”* NGNTS therefore considered that it would be *“appropriate that any costs associated with National Grid taking on the primary role of ensuring continued supply to these consumers should be borne by, and where possible targeted at, those who have defaulted on their contractual obligations.”*

RWE *“do not agree with the proposal that availability payments be included in the cost calculation for SMP buy price on a flat daily basis. The details of how this could work in practice are far from clear and it would surely not be possible to set the uplift ex ante. This effect, together with any delay or lack of transparency in setting SMP buy in real-time may distort market reactions to price. Cash-out prices should provide appropriate commercial incentives for market participants to balance their own positions and reflect costs incurred by the SO as residual balancer when undertaking balancing actions. It is not appropriate for SMP buy price to be used to recover costs in this way as it creates a distortion. There is a marginally stronger case to recover the costs through neutrality as arguably gas reserves provide collective insurance, albeit at the expense of introducing a moral hazard problem by weakening individual shipper incentives and thereby raising the likely total costs of system balancing. The polluter pays principle is maintained as the utilisation costs may set SMP buy on the day. Our preference would be to not interfere with the derivation of cash-out prices at all.”*

SSE did not *“believe that the costs should be recovered via SMBP as we understand that cash out is meant to provide an incentive to balance and not to recover costs. If availability fees are included within SMBP this will potentially result in users of the system avoiding being short even when there might be a requirement for the system to be short.”*

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

NGNTS suggested if the objective function were interpreted to expand its role, *“there would be a need to develop appropriate System Operator funding arrangements for the extended role.”*

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

After describing the background to the development of demand side response, BGT recognised that *“this modification proposal seeks to encourage additional DSR by*

requiring the NTS Transporter to put in place a tender scheme with consumers in which their cessation or reduction of consumption would be available on days of need.”

Whilst BGT supported the initiative to encourage greater DSR, it had "concerns about this being enabled through the actions of the NTS Transporter. In the role of System Operator (SO) the NTS Transporter has clearly defined obligations as residual balancer. As the supply/ demand situation becomes tighter, this SO role extends to encompass the potential for an emergency situation to develop, which may require the involvement of the Network Emergency Co-ordinator (NEC).

Although the Modification Proposal identifies a potential advantage of this function being administered by a third party as an impartial agency this would be co-incidental with actions required by the NTS Transporter in fulfilling the role of system operator and residual balancer. We believe that this could lead to significant conflict of interests.”

NGNTS stated again that “as detailed above the Proposal is insufficiently clear in a number of areas including the objective function of any proposed tender process and contract execution to allow an accurate assessment of impacts in this area. Currently the role of the Residual Balancer is predominantly completed via the On-the-day Commodity Market (OCM). Every transaction completed in this market has the Market Operator as a third party. As such the contractual risk of delivery on such trades is between National Grid and the Market Operator only. OTC trading is currently restricted to post GBA events. This Proposal seeks to extend the Residual Balancer’s access to OTC trading to cover all periods. This may result in an increase in the level of contractual risk for National Grid.”

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

NGNTS commented that “given the lack of clarity in the Proposal the impact on existing systems of any incremental workload cannot yet be assessed because the number of contracting parties involved is unknown as are the details of the contract call-off process and the volumes and triggers. Indeed, from the content of the Proposal, National Grid is unable to accurately assess whether or not any additional systems will be needed. Should either new systems need to be developed or existing systems require upgrades the development timescales needed to achieve these changes may be unachievable in the context of the proposed implementation timescales.”

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

AEP pointed out that the "shipper effectively acts as a middle man between the customer and NG, yet it will face implementation costs in terms of contractual arrangements, new operational procedures and training of staff. It will also face additional contractual risk if on the day volumes are estimated incorrectly or demand is not reduced sufficiently. Disputes may also arise between shippers and their customers over volumes and prices."

BGT suggested that the “establishment of demand side response contracts through the SO may serve to undermine those arrangements which already exist or are in formulation between Users and their customers. The proposal could therefore create perverse incentives

on Users to balance – relying on the SO to achieve a balance of supply and demand. Such perverse incentives were recognised in Ofgem's decision on Modification 0013a Removal of Transporter rights to interrupt for Supply /Demand reasons."

BGT were also "of the view that these arrangements will have an impact upon the commercial contracts held between Users and their customers. The price set in such arrangements would effectively act as a marker for trades conducted on the OCM but without transparent publication of information on a common platform and timescale, will influence the conduct of other trades. We believe that the intervention of the SO in this way will lead to an unnecessary distortion of the market. This is contrary to the established principles of the liberalised market which exists within our regime. In extreme cases it could be seen that a potential effect could be to exacerbate the supply/demand situation."

EDFE acknowledged that there would be "some implementation costs for both shippers and suppliers in order for all parties to have the necessary contracts, systems and processes to be able to make use of this mechanism. There may be some contractual risk involved with Shippers participating in the tenders by not having the necessary physical contracts in place to back up their offers to NG. It is not clear whether shippers will need to demonstrate a physical turn down at a specific meter point in order to participate in this mechanism..... However, it is clear that the Title NBP market does have a role to play in balancing the market on the day and thus should be made available as part of this proposal."

EON believed that implementation would lead to "yet another bureaucratic process for shippers to manage which will inevitably add to our costs. The smearing cost risk for some shippers is potentially huge. As a minimum the shippers in aggregate will have to cover option fees of a few tens of millions and face potential exercise fee costs of hundreds of millions.....For shippers with a large domestic portfolio the smearing cost risks are greatest. Other shippers may incur smearing costs but without any means of mitigating that cost (e.g. producer affiliate shippers who simply trade at the NBP)."

NGNTS pointed out that the costs of the Residual Balancer activities "are funded by the Balancing Neutrality processes. As a result Users are exposed to the same changes in contractual risk as the Residual Balancer." NGNTS therefore referred to its statement in respect of its own contractual risk if the Proposal were implemented.

RWE stated that "As an overriding principle, we believe that shippers should meet their customer's requirements and that the System Operator's (SO) involvement should be the minimum necessary to maintain the safety and operational integrity of the NTS. Implementation of Uniform Network Code modification proposal 013a "Amendment to Transco's rights to interrupt for supply/demand purposes" clarified the balancing responsibilities between National Grid Gas NTS and shippers. It confirmed that it is the primary role of the shippers and suppliers to ensure that customer demands are met and to secure sufficient supplies, not the role of National Grid Gas as SO. Clearly, we would strongly endorse this position and believe that implementation of modification proposal 0086 would undermine the clear demarcation set out in 013a and consequently dilute the commercial incentives that shippers face to balance their inputs and offtakes."

SP expressed the view that by "sitting alongside existing arrangements (but on a different commercial basis) we are concerned about the interaction of the demand side response arrangements. We are also concerned that there could be a negative impact on

relationships between shippers, customers and National Grid as a result.” SP also referred to National Grid as a residual balancer of the system and that shippers “are encouraged to balance their own portfolio and in so doing ensure that the system is also close to balance.” It suggested that tendering connected sites into the proposed arrangements “would restrict the flexibility within shipper’s portfolios and reduce their ability to effectively balance their portfolio and respond to the market circumstances.”

STUK referred to the work already carried out by shippers to *"introduce demand side arrangements into their enduser contracts"* and also to the work with *"customers to maximise the options available to them for the coming winter."* STUK believed that there was a risk that *"the implementation of modification 0086, would undermine any contracts that are now in place and the work that has been done by shippers to prepare their portfolios for the coming winter."*

TGP pointed out that it had *“already invested significantly in training relevant personnel and implementing necessary systems to facilitate the delivery of contracted demand response for the forthcoming winter. We note that very little time remains to identify the consequential operational and contractual impacts for implementing new arrangements. We anticipate, however, a separate NG demand reserve tender to result in shipper-offered demand response contracts becoming highly complex and potentially leading to such contracts becoming either unworkable or extremely difficult to agree. For example it is not clear how those customers who have agreed and participated in a tender via their supplier/shipper will be treated in the event that they change supplier.”*

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

The Proposer suggested that implementation would better "assist the forecasting and investment processes for procurement and delivery of alternate fuel supplies by customers, which should deliver security of supply benefits both on the gas and electricity systems".

AEP suggested that as a result of implementation consumers would *"need to agree detailed contractual terms with their shipper and have the necessary operational procedures in place to ensure they comply with instructions to reduce offtake. Alternatively they will face the commercial consequences."*

CIA was aware that the *"details of implementing this proposal have not been fully determined. We are aware from our members that there are significant levels of demand side response within the chemical sector that have not been contracted for under the current arrangements. Some chemical sites have back up fuel capacity, but did not switch last winter as they had already 'fixed' the cost of their gas, and were not price responsive. This suggests that the current arrangements are not adequate and alternatives need to be developed. The CIA believes that this modification provides this solution."*

CIA also believed that the *"current arrangements in the UK ensure that the domestic consumer will be protected at the expense of the industrial consumer. Currently both National Grid, and the domestic consumers, receive this service free of charge, with no compensation for those who are providing an essential service. The CIA believes that this modification will overcome this discrepancy."*

COR stated that *“the proposal addresses the requirement for appropriate compensation and incentives for demand side response is the point of greatest relevance to Corus. The proposal usefully introduces the concept of availability payment which may encourage consumer response: users are more likely to react to known benefits provided by a direct financial incentive.”* They add that *“The modification therefore potentially introduces appropriate risk and compensation to industrial users for their much required demand reduction. However, without accompanying detailed workings on how National Grid would implement the proposal, it is difficult for us to provide full support.”*

EDFE noted that consumers would need to *“demonstrate that they have the operational procedures and systems for participating in any tenders which NG take, else this may lead to even greater system risk and commercial costs in relying on gas response that won’t be there on the day.”*

energywatch *“consider that the proposal is going in the right direction towards providing a further demand side response option and route to market”,* although they *“need to see much more information before we can be fully supportive of its detailed intention.”*

Whilst recognising that certain large I&C customers would gain financially as a result of implementation, EON suggested that the competitiveness of storage and offshore swing would be *“reduced relative to demand side response given that the existing gas reserve proposal is limited to demand side flexibility only.”*

IC stated that *“As a large industrial consumer, we do not wish to have to undertake “Demand Response”. Demand Response is in effect “demand destruction”, which over the last winter was no doubt a mixture of temporary and permanent demand loss as consumers were unable to operate economically. We are concerned at the priority given to Demand Response (in for example the Winter Outlook Consultation) suggesting it is seen as a primary supply/demand balancing tool. It is apparent industrial consumers are paying the price of providing gas supply security.”* They add that if Demand Response were needed *“then it is essential that arrangements are in place which ensure this is delivered in the most efficient way. Further, it should be the case that participants (end users) providing response are actually properly compensated for being unable to operate sites, with this compensation being paid directly to the impacted party, and not being retained by shippers.”* IC considered that this Proposal *“is an attempt to develop such arrangements and we support the proposal.”*

NGNTS believed *“the Proposal is insufficiently clear in a number of areas including the objective function of any proposed tender process and contract execution to allow an accurate assessment of impacts in this area. However, monopoly Transporter intervention, as described in this Proposal, would serve to restrict the market’s access to this demand-side response as this would be presumably “reserved” for National Grid use only. Such a situation is clearly comparable to the restriction of storage gas from the market under the old Top Up counter-nomination process.”* NGNTS reference Ofgem’s decision letter in regard to Modification 0710 *“Removal of Top-up arrangements”*.

RWE stated that *“A key element of this modification proposal is the central role that National Grid Gas NTS has in contracting, procuring and deploying gas reserve. The proposer argues that National Grid Gas NTS involvement adds credibility. However, the addition of a strategic procurer of reserve undermines the efforts of suppliers, and causes*

inefficient and inconsistent price signals. The ensuing increased costs ultimately feed back to consumers.. This is a natural tendency when there is a monopsony buyer and has been observed in other markets."

RWE also referred to the principle that *"those awarded gas reserve contracts should be instructed to deliver agreed demand reduction volumes when it becomes economically efficient for National Grid Gas NTS to do so."* It then discussed the existing reluctance *"to enter into shipper interruption contracts...because of the concern that shippers will seek to extract the full commercial benefit arising from them."* RWE concluded from this that the *"same issue would seem to arise if National Grid Gas NTS access gas reserve contracts in an economically efficient manner."*

STUK pointed out that end-users *"do not have title to forward volumes of gas and would be unable to offer volumes of gas to National Grid in a Gas Reserve contract. Those customers that have fixed volumes in advance of the winter are incentivised to enter into demand side participation agreements with their shippers by the risk of being switched off with little or no compensation should we enter into an emergency. Customers are more aware than ever of the risk associated with winter thanks to the ongoing work of Ofgem and shippers, and so it is not clear what additional benefit 0086 will bring."*

To clarify some of the points raised above, the SME notes that this Modification Proposal does not provide for any contractual, financial, compensatory or other arrangements to be entered into between Users and their customers. This is a commercial relationship and is outside the scope of the UNC. Should this proposal be implemented and National Grid NTS choose to enter into contracts for demand side response with Users, availability payments and utilisation fees would be made to the relevant Users. Any pass through of these payments to end consumers would be based on the commercial arrangements in place between the User and their customer, which National Grid NTS is not party 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

AEP considered there were *"many contractual and operational complexities to be addressed and time is relatively short before this winter. Particular attention will need to be given to the customer transfer process and whether the contracted demand side response moves with the customer or stays with the shipper."*

EON considered that implementation *"would force NG to take forward positions in the market that extends their role beyond that of 'physical' residual balancing. As such certain FSA regulatory obligations may apply."*

NGNTS considered that implication would *"confuse the roles, responsibilities and obligations with regard to security of supply between Users and Transporters. This will be a retrograde step as these issues have only relatively recently been clarified as a result of the removal of Top Up and the associated ability of the residual balancer to interrupt consumers for Supply/Demand purposes."*

NGNTS expressed concern that implementation would *"result in a series of complex contractual relationships between National Grid and Users being put in place. It is also envisaged that each contract put in place between National Grid and a User would be*

subsequently backed up by a corresponding contract between the User, their supplier and their end consumer. We are not convinced that this new role for National Grid would be more efficient and economic than current arrangements. Nor would such contracting be able to guarantee that any payments made by National Grid to the User under such contracts would subsequently be delivered to the end consumer. In this respect the Proposal does not change the contractual relationship between shippers, suppliers and end consumer.”

NGNTS also believed that *“consideration will need to be given to the transfer of customers between Users and how any contracted demand side response would be dealt with in these circumstances.”*

NGUKD *“do not understand why it is proposed that the Demand Side Response (“DSR”) contracts are bilateral agreements and not industry-standard terms and conditions. These contracts are akin to the NExA arrangements and, on that basis, the DSR agreement would be ancillary transportation terms. Therefore, if the proposal is implemented, the framework agreement should be agreed through the existing code governance arrangements, with only the numeric variables agreed bilaterally. A common basic, highly visible, agreement is the only way that this scheme should come to fruition, as this is the only way bids could be ranked against each other, like-for-like. For instance, how would the SO rank bids where the default terms, or the pre-paid availability fee, differed across the bilaterals. Where the terms of the bilaterals differed, the value of the bids associated with them would also differ. Direct simple price comparison would not be possible, introducing market inefficiencies as markets work best where traded commodity is homogeneous.”*

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

Advantages

The Proposer identified the following advantages

- "Increases total demand reduction available to the market and represents a move towards a two sided market;
- Increases mechanisms available to the System Operator;
- Achieves greater certainty and visibility about actual demand reduction deliverable on the day;
- May allow upward adjustment of GBA trigger level to help prevent an emergency;
- A diverse range of demand side participants helps to avoid passing through problems to electricity market;
- Diversifies risk away from storage only options – hedges reliability (e.g. Rough), while achieving an ‘above the line’ solution;
- Restore confidence in supply/demand balance which may reduce wholesale market volatility and smooth unwarranted market prices;

- Creates incentives that will encourage customers to identify and value flexibility and gives better knowledge of firm customers that may be available to respond, in addition to facilitating increased awareness within organisations;
- Provides appropriate compensation mechanism for demand side participants which reflects true value of the service;
- Gives an incentive for investment in fuel switching via guaranteed option payments to successful bidders;
- Incentivises demand side participants to contract for alternative fuel;
- Customers can continue to benefit from flexible contracts and reserve market could stimulate further contract innovation;
- Smaller customers can participate via shipper aggregation services;
- Structured and visible contract conditions for demand response;
- Allows market participants faster decision making and response times;
- Represents tangible evidence that the industry and appropriate regulatory authorities are working towards putting into place the necessary system support mechanisms to provide additional flexibility and stability whilst also helping ensure security of supply."

AEP identified the following advantages:

- *"The proposal may facilitate additional demand side response. Although it maybe that demand side response that was already likely to be offered gains an availability payment, creating a cost to the industry.*
- *This could increase the mechanisms available to the System Operator on a difficult day but it will also increase operational complexity.*
- *It is not clear under what circumstances the GBA trigger could be adjusted upwards, frequent adjustments could lead to confusion in the market.*
- *We are not certain whether this will lead to greater capability for fuel switching or establishing alternative fuel stocks over and above the preparations that a company might reasonably make in advance of a potentially difficult winter."*

EDFE identified the following advantages:

- *"The proposal will facilitate additional demand side response by providing a commercial route to market for quantities of gas which would otherwise either not be available for turning down, or turning down at an uneconomic cost through self-interruption.*
- *Will act as an extra mechanism under NG's balancing tool belt to use on difficult balance days in winter, and possibly some summer periods going forward.*
- *Acts as an extra buffer before a GBA is called or it could even be used in conjunction with a GBA to provide a transparent trigger to the market.*

- *Creates competition amongst shippers and suppliers for these types of flexibility products which consumers can provide, whilst also financially compensating participating consumers.*
- *Has the potential to create price signals for investment in fuel switching and contracting for alternative fuels in order for large offtakes to substitute their fuel intake.*
- *Provides upfront incentives for shippers to balance ahead of the day however, through the feeding in of the availability payment into cashout prices ahead of the day."*

EON agreed that implementation might facilitate higher 'demand side' payments to I&C customers but pointed out that this would be "*ultimately paid for by all customers*"

NGNTS stated that "*The Proposal lists a number of advantages brought into play by National Grid contracting for demand side response. However we consider that there is nothing to suggest that the majority of the advantages listed by the Proposer, could not already be realised by Users for themselves in a more efficient, economic and flexible fashion using current market and incentive mechanisms. We have consistently argued that industry focus should be on developing this User/supplier to customer relationship as a means of securing the most efficient and economic operation of the regime.*"

SGN acknowledge that whilst they are supportive of the principle behind the proposal, they "*believe there is insufficient detail to fully consider advantages and disadvantages.*"

TGP identified the following advantage:

"The proposal may facilitate additional demand side response, however, it is unclear whether this is in addition to response that was already likely to be offered and hence whether the payment of an availability fee represents good value for money to the industry."

Disadvantages

AEP identified the following disadvantages:

- *"The availability and timeliness of real time cashout information may be diminished if these contracts are called. This could have a detrimental impact on the market and price driven response.*
- *The cost to the industry of this 'insurance' may be disproportionate to the benefits of potentially accessing additional demand side response given the volumes available.*
- *It will be difficult to establish whether a physical response has actually been delivered."*

EDFE identified the following disadvantages:

- *"The volume of gas tendered for and the prices taken could ultimately be uneconomic and increase system balancing costs, as it is difficult to determine the right level to contract for.*

- *The availability payment costs and exercise prices may not feed into real prices in a timely manner in order for shippers to economically and efficiently maintain a balance.*
- *The volume of DSR taken by NG may not be available on the day due to other mitigating circumstances such as plant outage thereby providing a false sense of security.*
- *The DSR contracted for may cause consumers to keep on taking gas during periods of tight system balances and high system prices for fear that they may be called on at any time, when they might already have voluntarily turned down."*

EON identified the following disadvantages.

- *"Extending NG role risks undermining the efficiency of the market. If NG were to take significant forward positions through gas reserve arrangements they would inevitably distort the market. This may important FSA implications for NG.*
- *The proposal is likely to be prohibitively expensive. Defining how expensive depends on defining the gas reserve tender quantity (the proposal is silent on this).*
- *It has significant financial re-distributional effects which harm competition between shippers and between suppliers.*
- *The proposal is inadequately defined and as such provides a vehicle for NG to do what it wishes with regard to the gas reserve tender and associated terms and conditions. Inadequate governance surrounding this proposal means that shippers face the prospect of subsequent unilateral changes to these arrangement by NG and no formal opportunity to propose their own changes if such rules are 'hived-off' into non code documents.*
- *NG, DNOs and shippers will incur costs to manage complex processes.*
- *Demonstrating demand side response has taken place as a result of the exercise of gas reserve contracts is likely to be difficult (if not impossible). It would certainly be an unwelcome administrative burden for transporters and shippers under near emergency conditions.*
- *Questions as to whom and when should demand side response be triggered adds to uncertainty which may lead to a delay in responding. Shippers may delay providing demand side response until instructed to by NG under gas reserve contracts.*
- *Gas reserve contracts may not be honoured under extreme price conditions,*
- *Alternatively the exercise price may become an 'artificial' ceiling on prices during a critical period in the run up to an emergency. The time taken to for the market to break through this ceiling may delay more appropriate prices (i.e. that reflect short-term supply-demand fundamentals) being signalled to the market."*

NGNTS identified the following disadvantages:

- *Monopoly Transporter intervention, as described in this Proposal, would serve to restrict the market's access to this demand-side response as it would be "reserved"*

for National Grid use only. Such a situation is clearly comparable to the restriction of storage gas from the market under the old Top Up counter-nomination process.....

- *A single Monopoly purchaser of such demand-side contracts rather than market procurement will lead to a premium being paid.*
- *Any assessment of the requirement for such Residual Balancing actions many months before information is available on the Users' intended imbalance position would be ill-informed, subject to extensive uncertainty and in our opinion likely to be considered inefficient and uneconomic.*
- *The Proposal is subject to considerable uncertainty and interpretation and as a result it is unlikely that respondents to this consultation process have properly and fully understood the intent of the Proposal."*

SSE also identified the disadvantage that implementation might "cause the SO to create a large option/futures position." SSE was concerned that "if incentives are not appropriately created and governed NGG may speculate through such a position."

TGP identified the following disadvantages:

- *We anticipate significant contractual risk and operational complexity in offering demand side response contracts and jointly participating in the proposed tender. This may of itself undermine separate shipper-customer demand side management arrangements.*
- *The availability and timeliness of cashout price signals generated as a result of these NG tender contracts may be diminished. This and the price inflator as a result of the availability fee may have a detrimental impact on overall balancing.*
- *The costs to the industry of providing such demand reserve may be disproportionately large compared to the volumes that may be available.*

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 nineteen parties:

APX Gas	APX	Not in support
Association of Electricity Producers	AEP	Qualified support
British Gas Trading	BGT	Not in support
Chemical Industries Association	CIA	Qualified support
Corus	COR	Qualified support
EDF Energy	EDFE	Qualified support
energywatch		Qualified support
E.ON UK	EON	Not in support
Gaz de France ESS	GDF	Support
Ineos Chlor	IC	Support
National Grid NTS	NGNTS	Not in support
National Grid UK Distribution	NGUKD	Not in support
RWE npower	RWE	Not in support
Scotia Gas Networks	SGN	Qualified support
Scottish & Southern Energy plc	SSE	Not in support
Scottish Power	SP	Not in support
Shell Gas Direct Limited	SGD	Qualified support
Statoil (UK) Ltd	STUK	Not in support
Total Gas & Power Limited	TGP	Not in support

Thus, there were two respondents in support of implementation, seven gave qualified support and ten were not in support. In addition, there was one confidential response that was not in support of the Proposal.

The Tender Process and Associated ‘Methodology’ of the Scheme

AEP considered that *"demand side response has a key role to play in managing the supply demand position particularly where supplies may be tight as in this coming winter. We therefore support in principle proposals that seek to facilitate demand side response. However we have some concerns, in particular many of the details are not clear or are yet to be developed so it is difficult to assess whether the desired outcome would be achieved in practice and physical demand side response actually delivered. In any case it will be very difficult to monitor this."*

EDFE noted that *"there are still many areas of this modification that are unclear or underdeveloped having only been properly discussed once at the June Transmission workstream since its inception, making it difficult to assess whether it will provide additional benefits at economical cost this winter. We agree that resolving this issue early this year is important but it is also equally important to dedicate sufficient time and attention so that all the positive and negative consequences are fully analysed and understood."*

EON stated that *"It is difficult for us to assess the full impact of this proposal because the modification proposal outlines few details with regard to the form and scope of any gas reserve tender, under what circumstances NG should exercise such contracts how cash-out prices may or may not be affected and from whom and how the costs of such arrangements should be recovered."*

GDF stated that whilst *"the intent of this modification is to enable suitable demand management reserve arrangements to be put in place, we are aware that the full details of*

a tender scheme itself are not currently developed and that inevitably there will be questions raised in response to the proposal that relate to the operational nature of a scheme. Gaz de France ESS is happy to work together with National Grid and other parties to progress the development of a scheme further. Indeed, we have actively sought to develop the details of a scheme throughout the process to date with limited success due to a lack of interest from relevant parties. However, it is pleasing to see very recent developments made via a re-draft of National Grid's System Management Principle's statement to incorporate change, which we believe to be relatively minor, that would be required should this modification be implemented."

NGNTS noted that "The Proposal includes "tender process guidelines" which include establishing a tender methodology which would establish the "desired volumes of load curtailment" in a way that is similar to the process in place for Operating Margins gas. This methodology would be established by National Grid NTS. Operating Margins is almost exclusively used to support the operation of the system, i.e. plant outage, whereas the demand side contracts envisaged in this Proposal are for the Residual Balancer role and or the avoidance of a Gas Deficit Emergency. Unlike Operating Margins Gas the Utilisation Costs incurred in response to this methodology will be smeared to Users via Balancing Neutrality. We therefore do not consider that it is appropriate that we should have the responsibility for establishing this methodology. In our opinion it would be better for the Users who directly benefit, and incur the costs resulting, from this methodology to have the responsibility to establish it."

NGNTS were also concerned that "despite several attempts by the community during discussions in the UNC Transmission Workstream, at the Ofgem chaired Gas Reserve Working Group meetings and in one to one discussions with the Proposer, the Proposal still lacks clarity in a number of key areas and is therefore open to considerable interpretation. As a result we consider that this Proposal is at very high risk of being misinterpreted by those responding to this consultation. We consider that the risk of such misinterpretation is significantly higher than for Modification Proposal 0021 which was subsequently rejected by the Authority partly on the grounds of the risk of misinterpretation of the term "Interruption". The complexity and far reaching nature of this Proposal and the extensive room for misinterpretation would, in our opinion, mean that it is unlikely that respondents to the consultation process have been able to properly and fully understand the intent of the Proposal. This situation would necessitate the same treatment of this Proposal as accorded to 0021 to allow for extensive further development and clarification."

RWE believed there were a "number of areas that require further development," and stated that "without a full understanding of how gas reserve will be procured and deployed it is not possible to undertake an informed assessment of the proposal's impact."

SGN believed that "significant further development is required before a proper impact assessment could be carried out and before it would be capable of implementation. Any attempt to implement this proposal as it stands, developing detail outwith the normal process, would only add to current uncertainty regarding demand side response and would not better facilitate relevant objectives or security of supply."

In particular, SGN posed the following questions:

- *How NTS would determine the volume of demand side response required?*
- *What customers or sites would be eligible for participation?*
- *What information would be released to the market ahead of the tender process?*
- *When the tender would take place?*
- *Details of the tender process and timescales?*
- *When and how would participants be notified?*
- *What would the pricing arrangements and bid structures be?*
- *How would bids be selected?*
- *How would costs be treated and recovered?*
- *Under what circumstances would NTS be allowed to exercise successful tenders?*
- *How would bids be selected?*
- *How would NTS be incentivised to minimise cost and improve efficiency?*
- *How would volumes be treated?*
- *What reporting would take place after the event?*
- *How would failure to delivery be dealt with?*
- *What is the IT impact in terms of cost and timescale?*

SP was “concerned that this is a commercial scheme which has been proposed minus the most relevant detail. The short timescales and the granting of urgency has adds to this concern. We would like to see an Impact Assessment on this modification.”

STUK expressed concern "with the suggestion that NG could contract forward with multi day Gas Reserve option. It is acknowledged that the forecast data used for future days is based on many variables making the data more unreliable the further away from the gas day. NG taking actions on this information will distort the market, leading to increased volatility."

STUK also expressed concern that "the nature of this enabling modification allows NG significant discretion in areas that are of great importance and a high number of unknowns remain including the volumes required, the utilisation periods and price, the trigger for the calling of reserve or the workings of the tender process."

TGP’s concerns with the Modification Proposal did not “stem from the stated intent of facilitating additional demand side management, but from how it seeks to deliver them. Many aspects of the proposal remain unclear or are yet to be developed. As such it is difficult to evaluate whether it will in practice deliver additional physical demand response and how the delivery of such a product would be monitored and verified.”

TGP was “particularly concerned that key elements of the proposal have been left to NG’s discretion. For example the process by which the tender will be conducted, the likely volumes to be contracted and the circumstances in which these contracts may be deployed; (i.e. the potential cost exposure and pricing impact). The costs projected by NG’s analysis

suggests that strong consideration ought to be given to conducting an impact assessment fully evaluating whether the costs of such an arrangement deliver appropriate value to the industry and how NG's incentives ought to be adjusted to ensure that potential costs are limited."

In the absence of these key elements being defined, TGP found it "difficult to fully evaluate the contractual and operational impacts of implementing such an arrangement, or whether such an arrangement will be compatible with separate shipper-customer demand response mechanisms. Additionally we share the concerns expressed by other shippers regarding the extent to which NG operating such reserve arrangements may crowd out or undermine shippers' focus in offering demand side response."

Comparison with Electricity

NGNTS reviewed the features of the electricity regime Standing Reserve and concluded that the correct comparable analogy for the gas regime is with the existing Operating Margins facility. It commented that in doing so it was clear "that the gas and electricity reserves currently procured are already significantly aligned, with differences arising solely due to the way the relevant markets operate (gate closure before the balancing period as apposed to gate closure towards the very end of the balancing period) and the nature of the energy product. This viewpoint is based on the information contained in the table below."

	<i>Gas: Operating Margins Reserve</i>	<i>Electricity: Standing Reserve</i>
<i>Demand Forecast Error</i>	<i>Yes</i>	<i>Yes</i>
<i>Supply Failure</i>	<i>Yes</i>	<i>Yes</i>
	<i>(offshore)</i>	<i>(generators)</i>
<i>Plant Failure (system constraint)</i>	<i>Yes</i>	<i>N/A</i>
<i>Orderly Rundown</i>	<i>Yes</i>	<i>N/A</i>
		<i>(no safety issue)</i>
<i>Plant Shortfall (after gate closure)</i>	<i>N/A</i>	<i>Yes</i>
	<i>(market able and incentivised to respond - no gate closure)</i>	<i>(SO is the sole system balancer after gate closure)</i>
<i>Timescale for Addressing Problem</i>	<i>Short term; gives time for the market to respond circa 4 hours</i>	<i>Short term; gives time for the market to respond circa 4 hours</i>

NGUKD noted that "During discussions it was suggested by some parties that a similar arrangement to that detailed in this proposal operates well in the electricity market. While we acknowledge that reserve arrangement works in electricity, we do not believe that this analogy inappropriate for a number of reasons."

NGUKD pointed out that when "operating an electricity system, a level of reserve needs to be held at all times. The last element of this reserve will only be required on very rare occasions and hence it is economic to hold this plant on reserve using low availability payments but high utilization payment. The SO therefore optimizes its costs by contracting

for standing reserve and reducing the level of reserve held on synchronized plant. This is quite different from the Gaz de France (“GdF”) proposal for the following reasons:

- *Standing reserve is generally utilized after gate closure: suppliers / generators are committed to their Physical Notifications and responsibility for balancing sits firmly with the SO;*
- *The regime of submitting Physical Notifications half-hourly up to gate closure ensures that the SO is aware of balancing actions being taken pre-gate closure by suppliers / generator.*
- *If standing reserve were not to be purchased, the SO would need to ensure that additional part loaded plant were available on the system. Standing reserve is only purchased to the extent that it serves to lower the cost of balancing the system.*

Furthermore, the GdF proposal would have the effect of reducing imbalance prices in the run up to an emergency. By reducing the financial penalties for being short at a time gas scarcity, this will increase the likelihood of demand exceeding supply and make a gas emergency more likely.”

RWE argued that the comparison between the gas reserve envisaged within this Proposal and Electricity Standing Reserve was "spurious" due to the fundamental structural differences between the two markets and the different natures of the large producers and consumers. RWE noted that “Standing reserve is a form of flexible capacity that is made available to be called (despatched) exclusively by the electricity SO within gate closure timescales (i.e. 1 hour before the “real time” settlement period) to ensure that there is a physical balance of supply and demand in real time. The absence of a gate closure in gas means that gas market participants can respond to individual energy imbalances during the gas day with any residual shortfall (or surplus) resolved by the SO using a variety of system management tools. The reserve capacity required by the electricity SO is defined in relation to physical system security standards (e.g. largest loss of generation infeed). This enables the system operator to determine a required level of “reserve” for each settlement period and a similarly transparent methodology is not so obvious in gas. The gas system operator mainly uses storage, linepack and existing interruptible contracts to provide similar contingency reserve. Finally, standing reserve is also need to meet system requirements such as changes in electricity frequency as defined in the security standards and there is no equivalent requirement in the gas market.”

Roles and Responsibilities of Industry Parties

BGT advocated "the encouragement and development of the extent of Demand Side Response to be pursued between Customers and their Shippers and Suppliers.....However, we do not believe that it is appropriate for such arrangements to be effected through the actions of the NTS Transporter indeed this approach could prove to be counter productive.”

EON believed that this “proposal fundamentally alters the respective roles of NG and shippers in the market and we believe there are significant risks associated with extending NG’s role beyond that of residual balancer. We consider that implementation of this proposal will weaken shipper balancing incentives and increase the chances of emergency procedures being invoked.”

NGNTS stated that *“It is widely accepted that Users have the primary responsibility to balance their supply and demand portfolio on a daily basis. This role is captured in the shipper licence Condition 3. In support of this primary obligation National Grid NTS takes on the role of the Residual System Balancer.”*

NGNTS noted that whilst the *“GdF Proposal may appear to have merit, in that it may result in end consumers having more confidence that they will be rewarded for their ability to offer demand side turndown, there is no doubt that changing one party’s role in the provision of a supply and demand balance in isolation will introduce asymmetry in the market, “confusion over the respective roles of shippers and Transco in balancing the market” referred to in the Ofgem decision letter on Modification Proposal 0740, may dilute the price signals, and would result in unnecessarily monopolistic interference in the commercial relationship between the shipper and its customer therefore introducing uneconomic and or inefficiently incurred costs.*

Our involvement in the Ofgem chaired Gas Reserve Working Group meetings and with the Proposer demonstrates that we are committed to addressing the issue of supply security as the GB market moves towards a greater gas import dependency. With this in mind we consider that if securing supplies or compensatory payments to consumers above and beyond that already provided for through the Storage Safety Monitors is an objective that the industry feels is appropriate then the roles, responsibilities and incentives of all parties should be changed in unison in order to mitigate the risks identified above and provide a clear direction for the industry going forward.

As such we feel that any merit in the GdF Proposal is outweighed by the adverse impact, created by limiting the Proposal to the role of National Grid, on the clarity of all industry parties roles and efficient provision of market incentives for Users to complete their primary balancing role and security of supply.”

NGUKD were concerned that *“implementation would blur the role of the shipper as primary balancer and the SO as residual balancer, leading to inefficiencies.”* They state that *“If the winter is long and cold and gas is in short supply, some shippers will, undoubtedly, find themselves short of gas. It is the role of the shipper to mitigate those risks. The risk mitigation should not be to rely on NTS to interrupt shipper demand, in a pre-determined price order.”*

NGUKD noted that *“It is proposed that this would be a voluntary scheme so the objective cannot be to enhance national security. We believe the motive is more about reducing the cost of balancing at peak; we are firmly of the opinion shippers requiring demand side response should procure, and bear the costs of procurement, without relying on **all** gas customers to underwrite their balancing costs. The calling-off of demand should be in the realm of the shipper, implementation of what would be complex and game-able (in terms of how do you quantify how much gas has been delivered if the only way of quantifying it is by estimating how much would have been taken if the interruption hadn’t occurred), arrangements would only add costs and uncertainty to the SO role.”*

In summary, NGUKD believed that *“arrangement advocated in the proposal is available to shippers now; all the proposal seeks to achieve is to revise the means of funding, and in the process blurring the line between the SO’s and a shipper’s responsibilities. We believe that payments made to effect balancing actions should be resolved between the shipper and*

its gas customers as it is between those parties where the benefits lie. An open-ended cross-subsidy should not be put in place and the SO should not be curtailing demand on a price basis; the shipper should be balancing using its own criteria in a manner that meets its business objectives.”

RWE stated that “If the intention of the modification proposal is to extend the National Grid Gas NTS balancing role, possibly to include explicit additional objectives than we question whether it would be more appropriate to seek to achieve this through a Licence rather than UNC route.”

Existing Arrangements

BGT believed that “that there is already a significant incentive upon Users to engage with their customers to put in place arrangements for DSR which reward the consumer and benefit continuity of supply appropriately. If there are specific difficulties experienced by customers in offering their DSR to the appropriate market these should be resolved on an individual basis between the customer and their shipper/supplier. In some circumstances it may be the case that persistent difficulties require referral or intervention by the regulator. If there are specific barriers to such arrangements in the UNC then modifications should be proposed to remove such impediments.”

COR noted that “Current schemes available via some suppliers have not been palatable and include the pass-through of shipper’s exposure to system buy prices in the event (albeit unlikely) of under-delivery. We are unwilling to recommend any exposure to the system penalties to our end-users in the event that a site, for unforeseen circumstances, has not been able to deliver the full quantity of demand response. The cashout mechanisms introduced via Mod 0044 were intended to provide an incentive for shippers to balance their portfolios, and not to pass these unquantifiable risks on to reluctant market participants (end-users) who are offering an essential service in difficult circumstances. For this reason we welcome the flexible delivery tolerances outlined in the proposal.”

NGNTS pointed out that “under the current arrangements it considers that it has the necessary tools to deal with operational problems and the operational balancing of the system e.g. access to the On the Day Commodity Market and to the Operating Margins gas reserve. However in this statement the Proposer appears to be confusing a concern about a gas Safety Monitor Breach and subsequent declaration, by the National Emergency Co-ordinator (NEC), of a Network Gas Supply (Gas Deficit) Emergency with an operational problem. National Grid would like to note that a storage Safety Monitor Breach is not necessarily related to a system operational problem but rather to the availability of energy. That is to say the system is operating normally but Users, as a community responsible for the primary balance of supply and demand, have been unable to supply sufficient gas to meet the demands they have contracted with. An example of this is where a storage Safety Monitor has or is about to be breached but the system is balanced and operating normally.

Furthermore we would note that we do not have the responsibility nor the tools available to us to totally prevent the occurrence of a Potential Gas Deficit (Safety Monitor Breach) Emergency following the introduction of UNC Modification 0710: Top Up Removal and UNC Modification 0740a: Amendment to Transco’s Rights to Interrupt for Supply/Demand Purposes. These Modifications successfully clarified the roles and responsibilities of industry parties in relation to the provision of security of supply, responsibilities of Users

in their primary balancing role and those of National Grid in completing the Residual Balancer role.

However, we would note that we do have the necessary tools to manage all variants of a National Gas Supply Emergencies. In relation to a Network Gas Supply Gas Deficit (Safety Monitor Breach) Emergency these existing tools allow for an amount of time deemed necessary to allow for the market to respond. If the Proposer is concerned that the market may not respond or will respond but too slowly, then perhaps the incentives on the market to respond to 'Difficult Days' is not sufficient. If this is the case perhaps it would be better to concentrate on strengthening the current incentive for the market to respond rather than trying to supplement the market with monopolistic intervention."

NGUKD stated that "Making demand-side gas available is a shipper responsibility and there is nothing to prevent the shipper from putting these arrangements in place now. As we see it the main change to the UNC that would result from implementation would be requirement for National Grid NTS ("NTS") to pre-contract and pre-pay for demand side availability by way of bilateral arrangements set up between NTS and shippers."

RWE noted that "As drafted, the proposal sets out that gas procured under the gas safety reserve arrangements will provide National Grid Gas NTS "an addition to the necessary but limited tools available at their disposal to facilitate its residual balancing role". In this regard, National Grid Gas NTS presumably believes that the available balancing tools are fit for purpose, a view with which we would concur. It is not clear what this modification proposal adds, as National Grid Gas NTS, in discharging its residual balancing role, could currently enter into these contracts without the need for a change to the UNC. They already hold forward tenders in other markets, such as for managing entry capacity buy-backs and presumably would enter into gas reserve contracts if they were more efficient than alternatives."

RWE also made reference to levels of demand side turn down experienced last winter. RWE "agree that the demand side is important but do not believe that the arrangements set out under this proposal will facilitate additional demand-side response. Evidence from winter 2005/06 indicates that the price-responsive demand did make some response to high winter prices and we expect the market to develop to increase the responsiveness to short term market signals. The last few winters have demonstrated the ability of CCGT's to respond quickly and reliably to changes under, sometimes extreme, market conditions. We believe that as long as the signals are clear then the CCGT's will respond accordingly. Last winter's experience showed that CCGT's provide a very responsive source of arbitrage between the gas and power markets. During winter 2005/06 we saw considerable demand-side response from the generation sector and the establishment of a merit order for the demand-side. In our view the inherent flexibility of gas generation plant will place them higher in the merit order than large firm I&C customers and nothing should be implemented to distort this. This UNC modification proposal seeks to introduce fundamental regime changes ahead of next winter that we believe are unnecessary."

SP noted that last year the industry witnessed demand side response "and a regime appearing to work with one balancing alert and no emergency. This modification may not change existing arrangements but it does add additional complexity."

SSE added that *“NGG already have the authority to contract for demand side response should they wish to do so. In addition, should this modification be implemented there would be no requirement on NGG to accept any offers following the tender exercise. Thus wasting the resources invested in creating and responding to the tender exercise. However, we do not believe there should be an obligation to accept tenders as this will force NGG to be a distressed buyer.”*

STUK noted the recent introduction of measures that could encourage demand side participation at times of system stress. *“These initiatives (GBA, Multi day trades) have yet to be given time to fully develop or for their use to be included into customer contracts. From being an active participant in these industry meetings STUK is of the opinion that the current arrangements should be maintained and allowed to work.”* STUK also believe that *“it is unclear what additional demand side response can be bought to the market with implementation of this modification. Shippers and large consumers on daily priced contracts are already strongly incentivised to offer a demand side response, through their exposure to high prices (which was demonstrated during winter 05/06).”*

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

EDFE suggested that implementation *“would enable NG NTS to further secure its obligations under its safety case as an alternative to other forms for system flexibility used to safe guard the system such as curtailing gas from storage, which is seen to be discriminatory to storage users.”*

EON stated that *“Nothing in this proposal directly affects safety as the (storage) safety monitors continue to protect domestic customers and designated protected customers.”*

The SME notes that there is no evidence of National Grid NTS being unable to meet the obligations of its Safety Case under the current arrangements.

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

No such requirement has been identified.

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

NGNTS identified two identified interpretations of the Proposal which would affect the programme for works. *“One interpretation would result in the publication of a Tender and feeding any actions taken into Cashout and Balancing Neutrality. Under another interpretation, based upon an understanding of the Objective Function of the scheme being to assist in the avoidance of a Gas Deficit Emergency (which includes a Safety Monitor breach), the programme of works to implement the Proposal would be extensive. It would potentially include, but not be limited to the following.*

- **GT Licence**
 - *Definition of the Objective Function of the new role.*

- *Development of SO funding arrangements for the completion of the new role.*
- *Possible changes or additions to the SO incentive structures to recognise the new role.*
- *The GDF Proposal calls for new SO incentives to procure the gas reserve economically & efficiently.*
- *The current SO pricing incentive may need to be adjusted to encompass prices paid in the demand management contracts as well as those paid 'On the Day'.*
- **UNC Changes**
 - *Text contained within the Proposal document calls for a gas reserve tender methodology statement to be developed. Initially this would sit outside of the UNC but would ultimately be placed within the UNC governance framework.*
 - *Current rules stipulate that multi-day trading is limited to a seven day period; this period may need to be extended to allow sufficient flexibility in contracting for demand side services to cover "duration" events or the wishes of some tendering parties.*
 - *Current rules stipulate that a residual balancing action can only be taken where there is an identified 'Operational Balancing Requirement' applicable to a particular Gas Day. UNC will need to be changed to allow deployment of the gas reserve tool on days where there might not be Balancing Requirements specific to those Gas Days i.e. as discussed in the Network Code Transmission Workstream during the development of Modification 0710 it is reasonably conceivable that a Gas Deficit (Safety Monitor Breach) Emergency could be triggered without there being a Operational Balancing Requirement. Since this Proposal seeks for these contracts to assist in the avoidance of such Emergencies then the rules restriction above would need to be removed to allow the Residual Balancer to take an action without an operational requirement being identified.*
 - *Changes to cashout determination would be required to enable scheme prices and costs to be fed into the process. It should be noted however that the Proposal is somewhat confusing in this area as it refers to "costs" being recovered through cashout processes which would require a reconfiguration of the cashout process and function.*
 - *Additional or extended payment and credit terms will need to be established. Currently the Residual Balancer trades pre-dominantly with one party, the Market Operator, and therefore, to the most extent, have a single credit relationship through the Energy Balancing Credit Committee (EBCC). In future the Residual Balancer may be require to expand its contracting with multiple parties and thus will require extended credit arrangements with each of them agreed by the EBCC.*

- *In order to efficiently and economically assess any demand side tender responses there may be a requirement for new information flows to be instituted e.g. information on the terms and conditions of the existing supply, storage and interruption contracts held by User prior to the tender process.*
- **SMPS/PG**
 - *As detailed above some amendments to these documents may be required. Again this is subject to the interpretation of the objective function of the Proposal.*

Irrespective of the Objective Function of the scheme the process to run the tender and the contracts associated with this activity will require development with input from Users. “

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

AEP pointed out that the "proposed implementation timetable is very challenging given the number of new arrangements and procedures that need to be put in place prior to this winter. These include contractual and operational procedures for NG and new contractual clauses in customer supply contracts."

EDFE stated that “the implementation timetable is very challenging as this modification has been raised as urgent, and given the lack of development may cause the proposal to take longer to implement than if it had been properly developed. “

EON pointed out, in respect of any subsequent tendering process, that implementation in "good time" for winter 06/07 would not be feasible, "given that the proposal represents a fundamental change in the roles of NG and shippers. New systems and procedures for tendering, calling, measuring and recording the level of demand side response under these arrangements are required. System changes to cash-out prices and smearing are also required. All these would have to be tested ahead of the winter."

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 6 July 2006 of the 8 Voting Members present, capable of casting 10 votes, 1 vote was cast in favour of implementation. Therefore the Panel did not recommend implementation.

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

UNIFORM NETWORK CODE - TRANSPORTATION PRINCIPAL DOCUMENT SECTION D - OPERATIONAL BALANCING AND TRADING ARRANGEMENTS

Amend paragraph 1.4.1(c) to read as follows:

"(c) a "**Market Balancing Action**" is a Market Balancing Buy Action or a Market Balancing Sell Action or a Demand Side Response Action."

Amend paragraph 1.4.3(a) to read as follows:

"(a) the "**highest Market Offer Price**" is ~~either~~ the highest:

(i) ___ Market Offer Price; ~~or highest~~

(ii) ___ Non-Trading System Offer Price; ~~or~~

(iii) Demand Side Response Utilisation Charge in respect of a Demand Side Response Action;

for the Gas Flow Day in question; and"

Insert the following as new paragraph 5:

5. Demand Side Response

5.1 National Grid NTS shall be entitled to enter into (by conducting a tender) arrangements ("**Demand Side Response Arrangements**") with Users, pursuant to which such Users agree to procure a reduction in the offtake of gas from the Total System as specified in such arrangements. The scope of such tender and/or arrangements and the terms upon which, and the time or times at which, National Grid conducts such a tender and/or enters into such arrangements shall be determined by National Grid in its sole discretion.

5.2 Any arrangements entered into pursuant to paragraph 5.1 shall be Eligible Balancing Actions for the purposes of the Code.

5.3 For the purposes of the Code:

(a) "**Demand Side Response Action**" is an action taken by National Grid NTS to exercise its rights under a Demand Side Response Arrangement to require a User to procure a reduction in the offtake of gas from the Total System;

(b) "**Demand Side Response Availability Charge**" is the charge(s) (if any) payable by National Grid NTS to a User pursuant to a Demand Side Response Arrangement (other than any Demand Side Response Utilisation Charge). For the purposes of the Code, the Demand Side Response Availability Charge in respect of a Demand Side Response Action shall not be a Market Balancing Action Charge in relation to such Demand Side Response Action;

(c) "**Daily Demand Side Response Availability Charge**" is the total Demand Side Response Availability Charge payable by National Grid NTS to a User

pursuant to a Demand Side Response Arrangement in the Gas Year in question divided by 365;

(d) “Aggregate Daily Demand Side Response Availability Charge” is the sum of all Daily Demand Side Response Availability Charges for a Gas Flow Day; and

(e) “Demand Side Response Utilisation Charge” is the charge (in pence per kWh) payable by National Grid NTS to a User pursuant to a Demand Side Response Arrangement on any Day in which National Grid NTS requires the User to procure a reduction in the offtake of gas from the Total System as specified in such Demand Side Response Arrangement.

5.4 In addition to any amounts payable in accordance with Section F2 in respect of a User’s Daily Imbalance, where a User has a negative Daily Imbalance, each User with a negative Daily Imbalance will pay to National Grid NTS an amount calculated as follows:

$$A = \text{ADDSRAC} * (\text{UDI}/\text{TDI})$$

Where:

A is the amount payable by each User with a negative Daily Imbalance;

ADDSRAC is the Aggregate Daily Demand Side Response Availability Charge in respect of the Day in question;

UDI is the User’s negative Daily Imbalance for the Day in question; and

TDI is the total of all Users’ negative Daily Imbalances for the Day in question.”

SECTION F - SYSTEM CLEARING, BALANCING CHARGES AND NEUTRALITY

Amend paragraph 4.4.2 to read as follows:

"4.4.2 **"Aggregate System Receipts"** for a Day are the aggregate, for all Users, of the following:

- (a) the Market Balancing Action Charges payable to National Grid NTS in respect of each Market Balancing Sell Action (or negatively priced Market Balancing Buy Action) taken for that Day (other than any Market Balancing Sell Action (or negatively priced Market Balancing Buy Action) taken for that Day as a result of a Localised Transportation Deficit and/or a Transportation Constraint) and any other amounts payable to National Grid NTS in respect of Eligible Balancing Actions taken pursuant to Contingency Balancing Arrangements (other than as a result of a Localised Transportation Deficit and/or a Transportation Constraint) in respect of such Day;
- (b) the Daily Imbalance Charges payable to National Grid NTS in respect of each negative Daily Imbalance on that Day; and

- (c) the Scheduling Charges payable to National Grid NTS in relation to Input Scheduling Quantities and Output Scheduling Quantities in respect of that Day;
- (d) the Physical Renomination Incentive Charges payable to National Grid NTS in respect of that Day;
- (e) Total Incentivised Nomination Charges payable to National Grid NTS in respect of that Day;
- (f) the amounts received by National Grid NTS from Users pursuant to Section Q6.2 or Section Q6.3 in respect of Users' Emergency Curtailment Quantity relating to that Day or any revisions thereto; and
- (g) the amounts received by National Grid NTS from Users pursuant to Section Q7.2 relating to that Day; and
- (h) the amounts received by National Grid NTS from Users pursuant to Section D5.4 relating to that Day."

Amend paragraph 4.4.3 to read as follows:

"4.4.3 **"Aggregate System Payments"** for a Day are the aggregate, for all Users, of the following:

- (a) the Market Balancing Action Charges payable by National Grid NTS in respect of each Market Balancing Buy Action (or negatively priced Market Balancing Sell Action) taken for that Day (other than any Market Balancing Buy Action (or negatively priced Market Balancing Sell Action) taken for that Day as a result of a Localised Transportation Deficit and/or a Transportation Constraint) and any other amounts payable by National Grid NTS in respect of Eligible Balancing Actions taken pursuant to Contingency Balancing Arrangements (other than as a result of a Localised Transportation Deficit and/or a Transportation Constraint) in respect of such Day;
- (b) the Daily Imbalance Charges payable by National Grid NTS under paragraph 2.2.1 in respect of each positive Daily Imbalance on that Day;
- (c) the amounts payable by National Grid NTS to Users pursuant to Section Q6.2 or Section Q6.3 in respect of Users' Emergency Curtailment Quantity relating to that Day or any revisions thereto; and
- (d) the amounts payable by National Grid NTS to Users pursuant to Section Q7.2 relating to that Day;
- (e) the Aggregate Daily Demand Side Response Availability Charge in respect of the Day in question; and
- (f) the Market Balancing Action Charges payable by National Grid NTS in respect of each Demand Side Response Action taken for that Day."

Joint Office of Gas Transporters

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 :