

CODE MODIFICATION PROPOSAL No. 0085
"Introduction of Gas Reserve Arrangements"
Version 1.0

Date: 10/05/2006

Proposed Implementation Date: 18/08/2006

Urgency: Non-Urgent

Proposer's preferred route through modification procedures and if applicable, justification for Urgency

(see the criteria at http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/2752_Urgency_Criteria.pdf)

Gaz de France ESS has, in conjunction with other interested industry parties, participated in the Ofgem chaired Demand Side Working Group and Gas Reserve Group. The economic and security benefits of an active demand side are well documented. We believe that this Modification Proposal encapsulates discussions to date for encouraging a more wide-spread, economic, efficient and co-ordinated demand side response from customers in the gas sector.

This proposal has been presented at the Transmission Workstream on 4 May 2006, and will then progress to the UNC Panel meeting scheduled for 18th May 2006. It has been subject to considerable development in the light of response for shipper and customer representatives. Our preference is that following presentation to the UNC panel the Modification Proposal is sent directly to consultation.

Nature and Purpose of Proposal (including consequence of non implementation)

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 outturn 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.

This Modification Proposal seeks to put in place Gas Reserve Arrangements to secure additional balancing volumes sourced from the demand side. 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.

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 necessary ahead of real time and procure an appropriate volume in an efficient and economic manner;
- 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;
- 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 a new element of 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.

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.

Basis upon which the Proposer considers that it will better facilitate the achievement of the Relevant Objectives, specified in Standard Special Condition A11.1 & 2 of the Gas Transporters Licence

Implementation of this modification would better facilitate the following relevant objectives:

- (a) “the efficient and economic operation of the pipeline system” 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.

Additionally we consider that a direct route to market for Daily Metered customers, either through their shipper, or via a consolidator, backed up by a clear availability incentive will bring more demand response to the market, enhancing security of supply.

- (d) “the securing of effective competition between shippers and suppliers” by introducing a wider range of contracts available to daily metered customers and reducing current barriers in the market to demand side participation.
- (e) “the provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards are satisfied as respects to the availability of gas to their domestic customers” 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.

This Modification Proposal provides assistance to Ofgem in delivery of their wider statutory duties around Security of Supply.

Any further information (Optional), likely impact on systems, processes or procedures, Proposer's view on implementation timescales and suggested text

Gaz de France ESS would expect that National Grid NTS be required to make modest changes to its System Management Principles Statement and Procurement Guidelines in order to facilitate certain elements of this modification proposal. It is paramount that scoping of such amendments be undertaken as soon as possible following approval to this proposal for progression to consultation. An early indication by National Grid NTS of the required amendments would be much appreciated.

National Grid NTS will be required to develop additional contracts and processes in order to facilitate this Modification Proposal. In addition to development of the tender process an annual report evaluating the tender selection process, which will be developed over time to include analysis of year on year service availability and utilisation, will be produced.

Where National Grid NTS incurs costs, for example, following changes to IT systems, cost recovery would be achieved through the development of an appropriate modification to the current System Operator Incentive arrangements.

Gaz de France ESS proposes the following timetable:

Transmission Workstream Meeting	4th May 2006
UNC Modification Panel Meeting	18th May 2006
Consultation Close out	16th June 2006
Final Modification Report	23rd June 2006
UNC Modification Panel Meeting	20th July 2006
Ofgem Decision	4th August 2006
Implementation Date	18th August 2006

Gas de France ESS is proposing an 18th August 2006 implementation date in order to ensure that National Grid NTS has sufficient time to prepare for and run the Tender Process to completion ahead of Winter 2006/07.

Gas Reserve tender process guidelines

- It is proposed that National Grid NTS procure gas reserves via a tender process to identify appropriate volumes to secure potential demand reduction for the subsequent winter;
- The desired volumes of load curtailment would be quantified by reference to a published methodology backed up by procurement guidelines, in a way very similar to that already in place for OM;
- National Grid NTS would tender for the defined quantity of load curtailment initially from shippers with qualifying Daily Metered customers;
- Shippers would then bid for the load reduction and these quantities would be financially committed if called;
- National Grid NTS would enter into contracts with successful bidders, and manage the call-off of options under these contracts.

Volume Calculations

- Demand reduction volumes should be equal to a shipper nomination minus an agreed minimum quantity (where applicable) for an affected Supply Point;
- A site may require to specify a minimum quantity in order to continue safe operation
- In the event that shipper nominations are not available, the Daily Metered SOQ minus agreed minimum quantity (where applicable) should be used as a default quantity;

Triggers for Gas Reserve

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.

Views are sought from respondents in the consultation phase of the modification as to the most appropriate triggers or combination of triggers, but options include:

- price stacking against OCM bids
- demand level triggers
- GBA or more likely %GBA.

Costs and changes to the derivation of System prices

Availability Payment

- Successful participants will receive a flat fee Availability Payment on entry to the scheme, recovered in a similar manner to that of Operating Margins Gas via Balancing Neutrality Charges;
- The cost of Availability Payments will be reported in advance of the scheme commencing;

- The cost of Availability Payments will be included in the calculation of Balancing Neutrality Charges in a similar to the current recovery of Operating Margins Costs detailed in Section K of the UNC;

Utilisation Payment

- Where called to provide demand response participants will be paid a Utilisation Fee based upon the volume made available at the time of the instruction, validated by Daily Metered volumes, subject to an agreed delivery tolerance;
- The Utilisation Fee(p/kwh) will be determined in advance of the bid being instructed.
- Utilisation may be tailored to occur on a specified number of occasions over a period and will include a minimum/maximum duration, notice period and recovery time;
- The Utilisation Fee will feed through into System Average Price as a Balancing Transaction , i.e. a built in cost on a daily basis, calculated by reference to delivered volumes;
- Non-delivery will be discouraged via events of default and associated contractual consequences.

Note

It is not anticipated that the speed in which system prices are calculated and published will be adversely affected should this modification be implemented.

Advantages of this proposal

- 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;

Disadvantages of this proposal

None identified

Suggested Legal Text

Transporter to provide

Code Concerned, sections and paragraphs

Uniform Network Code – Transportation Principal Document sections F and K

Proposer's Representative

Phil Broom (Gaz De France)

Proposer

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Signature

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