

Review Group Report
Modification Reference 0028

Review of Section Q for compliance with HSE Regulations

1 Scope Of Work

The Review Group was formed to consider the content and procedures within Section Q of the Network Code (Emergencies) in the light of the revised safety framework instigated by the Health & Safety Executive (HSE), and described within the Gas Safety (Management) Regulations 1996.

In addition to the task of bringing the Code in line with current legislation, the Review Group have considered the links between the commercial tasks and operational tools described within the Code and the physical/operational tasks required to manage an emergency.

The following issues were considered:

1. The flow of information regarding gas availability
2. Definitions/Terminology and the introduction of a " Potential Emergency " stage
3. Timing of suspension of certain sections of the Network Code
4. Cash out price for gas post/during an emergency
5. Reinstatement of the Code post emergency.

2 Background

2.1 Gas Safety (Management) Regulations 1996

As a result of changes within the UK gas industry, in particular the emergence of new gas transporters and multiple gas buyers from offshore sources, the HSE published the Gas Safety (Management) Regulations (GSMR), which provide a framework under which a Supply Emergency is managed. These regulations place duties of co-operation on various parties and require every gas transporter to prepare, and subsequently receive approval by the HSE for, a safety case which describes the means by which that transporter safely conveys gas and manages an emergency occurrence. In addition to this, the regulations created a new body, the Network Emergency Co-ordinator (NEC), who is responsible for co-ordinating the actions of all transporters in the safe management and prevention of a Supply Emergency. The regulations came into force on 1/4/96 and the NEC was required to have a Safety

Case approved by 1/10/96. Individual transporters were required to have a Safety Case approved by 31/3/97.

2.2 Network Emergency Co-ordinator

Transco was appointed as the NEC and subsequently had its NEC Safety Case approved on 31/10/97. The content of this Safety Case and the framework it described had a significant bearing on the discussions within the Section Q Review Group. Of particular note was the decision by the HSE in September 1996 that the NEC did not need to have access to information from upstream sources about the availability of gas during, and prior to, an emergency.

2.3 Beach Issues Group

In parallel with the Section Q Review Group, the HSE chaired a *Beach Issues* group. The principle purpose of this group was to resolve the difficulties experienced by, and facilitate agreement between, the NEC and upstream parties for the provision of gas availability information. The progress of this group was reported to the Section Q Review Group and vice versa to ensure consistency.

3 Summary Of Review Group Discussions

3.1 Definitions / Terminology

The group reviewed the definitions and terminology currently used and reviewed the merits of retaining existing terminology as opposed to using the terms and definitions contained within the NEC Safety Case. In conclusion to this debate, the terminology and definitions used in the NEC Safety Case and, subsequently used in the Transco Safety Case and the Transco Emergency Procedures, were agreed to be most appropriate for the Network Code.

3.1.1 Potential Emergency

The group also considered the incorporation of the Potential Network Gas Supply Emergency phase as described in the NEC Safety Case. In the first instance this had been considered to be a more usable facility as the NEC were expected to have a high level of offshore/beach availability data which would enable the NEC to declare a Potential Network Gas Supply Emergency with a high degree of certainty that sufficient gas would be available to resolve the situation.

The group debated whether in order to maximise the benefit to the system of a Potential Network Gas Supply Emergency, there should be changes to current nomination restrictions, the hour bar to renominations, imbalance charges, overrun charges and scheduling charges. In conclusion, it was agreed that the only change that was appropriate, and that was practical from a systems perspective, was the reduction of the flexibility overrun multiplier to one.

Subsequent to these discussion the likelihood of the NEC being able to declare a Potential Network Gas Supply Emergency was substantially reduced by the HSE decision that the NEC would not be required to obtain upstream availability data. The group considered the instigation of some other form of " alert " state, but concluded that sufficient commercial signals would be available to allow commercial market forces to respond and that Section Q should only reflects the Potential Network Gas Supply Emergency as described in both the NEC and Transco Safety Case.

3.1.2 Differentiation Of The Role Of The NEC

Section Q of the Network Code was drafted before the existence of the Gas Safety (Management) Regulations and took no account, other than by reference to expected changes in legislation within the Transition Document, of the new roles played by the NEC and Transco. The group has considered both the role of the NEC and Transco as set down in the respective Safety Cases and the proposed modification of Section Q takes account of the manner in which an emergency on either a national or local scale will now be managed. The detail of how Transco will actually carry out its duties and responsibilities in the management of such an occurrence will not be described in detail within Section Q as this is contained within the Transco emergency procedures.

3.2 Timing Of Suspension Of Certain Sections Of The Network Code

The appropriateness and timing of suspension of various sections of the Network Code was debated in some detail, and whilst it was agreed that the commercial regime should in effect be suspended when load shedding is taking place, the group felt it was worth considering circumstances where it may not be appropriate to suspend certain commercial mechanisms of the Code.

3.2.1 Purpose Of Non Suspension

Within the existing Section Q it is not possible invoke emergency interruption or firm load shedding in response to an emergency on a national scale without the suspension of large parts of the Network Code, in particular the flexibility mechanism.

Whilst in most circumstances this will be appropriate, the group felt that there may be occasions where difficulties affecting the NTS could be resolved by emergency interruption and selective NTS firm load shedding. In these instances it may not be desirable for the industry to suspend the normal commercial regime in order to facilitate this action.

Within the review group there appeared to be general agreement to allow Transco some discretion to not suspend normal operation provide the extent of the circumstances when this would be appropriate could be agreed and the parameters to be applied defined. This was considered in each of the two circumstances which could give rise to such a load shedding requirement.

3.2.2 Supply Demand Imbalance

In this circumstance there would still be an acute system need for the gas. If the flexibility mechanism has been suspended then shipper would be obliged (through Section Q) to make this gas available and payment would be made at the cash out price. However, if the flexibility mechanism has not been suspended, then the shipper can make that gas available confident that Transco are obliged to accept the bid. In the case of a VLDMC load this will be a large amount of gas (up to 120 million kWh/day) at a very high price. This amount of money would have a significant impact on the neutrality pool with far reaching implications for other shippers.

3.2.3 Transportation Constraint

In this instance the loss in system capacity leads to an effective reduction in supply that may be balanced by interruption and selective firm load shedding. There would therefore be no obvious need for Transco to acquire the shed load via the flexibility mechanism and extreme prices could therefore not automatically be commanded. However, the group felt that there were still opportunities for shippers to make large sums of money by manipulating their inputs in the knowledge that the system was short by the shed amount.

3.2.4 Conclusions

In conclusion to this debate, the Review Group felt it was not possible to define sufficiently the parameters under which such a non suspension could take place without the risk of offering significant commercial advantages and disadvantages in a discriminatory manner. The existing principle, of suspension of relevant sections of the code in circumstances which require load shedding on a national scale, was agreed to be the most appropriate in the absence of such defined parameters and is therefore retained.

3.3 Gas Availability In An Emergency

3.3.1 Gas Availability Information

The Code contains a provision for shippers to provide information to Transco on maximum gas availability in an emergency or near emergency. It was concluded that this should be retained within Section Q but realigned with the stages of emergency detailed in the Transco Safety Case.

One of the original requirements of the NEC was that it should receive information on a day to day (or standing) basis from the upstream industry, and from shippers via the relevant transporters. The absolute requirement for upstream information was removed by the HSE's re-interpretation of the GSMR and this precipitated a re-evaluation of the need for standing shipper information. The conclusion the group reached, was that shipper data was of extremely limited value, in the absence of upstream information, as seasonal variations and beach trading will make it difficult to establish which shipper would be able to provide the gas on any given day, and the likelihood of double counting was high. In view of this the group felt that the

provision of data on a day to day or standing basis was of little practical value. Consequently no new procedure has been established.

3.3.2 Access To Gas

Within the Network Code, Section Q currently contemplates Transco either obtaining un-contracted gas directly from a producer or acting as an agent on behalf of a shipper in nominating gas inputs directly to the upstream producer.

In terms of the un-contracted gas, an exercise carried out by Transco in pursuit of maximum gas availability data had indicated that there was little if any un-contracted gas available upstream. It was concluded by Transco and the group that the potential benefit to the system was not sufficiently great for Transco to pursue the development of contracts to facilitate this procedure and to establish a suitable price for such gas.

With regard to Transco acting as a shippers agent, it was agreed that this was originally intended to facilitate rapid communication with the terminal operator and producer to maximise gas to the system. The view was expressed within the group that shippers now had far more robust 24 hr per day operations and they would be able to increase nominations in a timely fashion. There was also concern about the extent to which the shippers available gas could be accurately nominated in view of beach trading arrangements etc.

In conclusion to this work Transco stated that they still felt there was a role for direct communication but as this would require some form of agreement with the upstream partner to facilitate the procedure this could not form part of the Code. Accordingly it is recommended that both of these actions are not included within the Network Code. If as a result of subsequent development of contracts to facilitate such arrangements it transpires that text is required in the Network Code, then subsequent modifications would be required.

3.4 Reinstatement Of The Network Code Post Emergency

3.4.1 GSMR Requirements

The Gas Safety Management Regulations require the NEC to co-ordinate the actions taken in an emergency and to retain this co-ordinating role until the gas supply infrastructure is operating normally. If a significant amount of firm load has been shed, normal operation of the system can not realistically be claimed until all supply points have been restored. As a result of this requirement, the declaration of an emergency having finished may not be possible for a considerable period of time over and above that required to reinstate the NTS and LDZ.

3.4.2 Commercial Regime

In the event of a Network Gas Supply Emergency with general firm load shedding the normal operation of the Network Code will be suspended and gas balances will be cleared on the basis of the pre-determined cash out price. General agreement exists within the Review Group, for the Code being reinstated as soon as is

reasonably possible. However it was acknowledged as vital that this reinstatement is tied to the safety of the system and takes place in a controlled manner.

3.4.3 Proposed Timing

Within the Transco emergency procedures, stage 5 is the reinstatement of the system and restoration of supply points. The interests of the industry may not be best served by maintaining Code suspension until the restoration process is complete and a possible starting point for the return to normal commercial operation would appear to be the commencement of stage 5. However, the suitability of this was felt to be dependant on the circumstances giving rise to the emergency. An example cited being a shipper whose offtakes were in normal operation but whose principal input facility was still not functional being exposed to uncontrolled imbalance charges.

Transco and shippers felt that other than the safety and integrity of the system, the most important factor is control in the commercial processes. It was therefore agreed that it was not appropriate to restart ordinary procedures until sufficient information was available for Transco to make a robust system demand estimation and for shippers to know which DM sites were operational and which were not. This can not however be defined in advance and as a result more mechanistic parameters can not be used.

3.5 Cash Out Price

3.5.1 Price Parameters

Discussion on the price which would be charged for gas post suspension of the ordinary commercial regime has occupied a considerable amount of time. The purpose of the cash out price is to provide a fixed price to be used to clear system imbalances following the suspension of normal Network Code cost mechanisms.

Following discussion within the Review Group and with regulatory bodies, the following attributes were identified as desirable for a cash out price:

- Transparent calculation mechanism
- Easily obtainable
- Limited volatility
- Provide economic incentive to bring gas ashore
- High enough to restrict number of claims relating to gas purchase costs
- Restrict financial exposure to under delivery

3.5.2 Price Options

Whilst it was acknowledged that any one pricing mechanism would not fulfil all of the above criteria, the aim of the Review Group was to try and achieve the most suitable compromise in the interests of the industry. The original pricing method in Section Q has been rendered obsolete by changes to Section F of the Code.

The following methods were proposed in various discussions. All of these methods were considered to be transparent in their means of calculation and reasonably available.

1. SAP based on 7 days prior to emergency
2. SAP based on 30 days prior to emergency
3. SAP based on 7 days prior to emergency if Top Up gas has been taken, SAP based on 7 days prior to emergency plus a factor to be determined if Top Up not taken
4. SAP based on 30 days plus a factor to be determined
5. SAP based on 365 day SAP plus differing factors for summer and winter

The discussions on these possible options highlighted the difficulty in setting a cash out price and the fact that advantages and disadvantages would be heavily dependant on the nature of an emergency and the position of an individual shipper at such a time. The group were ultimately unable to agree on a price which would satisfy all of the desirable criteria, but did conclude that a price based on the SAP for the 30 days prior to an emergency would best serve the needs of the community.

3.5.3 Post Emergency Claims

With regard to claims for discrepancies between cash out price and price of gas after an emergency, Transco confirmed that they would appoint an independent auditor as provided for within the Code. As with many aspects of an emergency the number of such auditors will be dependant upon the scale, duration and number of claims associated with an emergency.

4 Conclusions Of The Work Group

4.1 Compliance With Current Legislation / Documentation

The principle task of the group was to revise Section Q of the Network Code to reflect the arrangements now in place for the management of a Supply Emergency on both a national and local scale. A great deal of work has been carried out in the production of a proposed redraft of Section Q which the group believes should replace the existing draft of Section Q through the modification process.

4.2 Cash Out Price

The group has concluded that the most appropriate cash out price which will be during a suspension of the normal commercial regime should be a System Average Price based on the 30 days preceding the emergency. Other prices which were considered were felt to have some merit, however, the balance between " winners and losers " was agreed as being best served by a 30 day price. With regard to issues such as the attractiveness of supplying gas to the UK via the Euro interconnector as opposed to the continent. It was felt that this could not be accurately assessed until such time as the arrangements for the interconnector are more firmly established. It was also felt that the use of an SAP based price, as opposed to other reference points such as Spot Market, was appropriate in view of its widespread use within the Code.

4.3 Reinstatement Of The Network Code Post Emergency

With regard to the reinstatement of the Code, it was concluded that the overriding factor in achieving this was that it occurred in a controlled manner so as to not unduly expose a shipper to risks associated with commercial balancing. Throughout the discussions it was assumed that Transco would not sanction any reinstatement of the commercial regime if it could affect the safety of the network. The key issue for shippers is that they can be provided with sufficient information about system demand and that the duration of any suspension is kept to a minimum. Obviously the provision of such information can not be given a definitive timetable as it will be dependant on the circumstances of the occurrence. In conclusion it was felt that Transco should not restart the commercial mechanism until such time as the integrity of the NTS and the LTS are restored and then at such time as robust demand estimation information can be produced. Any other circumstances would be possible provided consultation with regulatory bodies had taken place.

4.4 Non Suspension Of The Code

Whilst it has been acknowledged within the group that it may in certain circumstances be useful for Transco to not suspend the Code in order to facilitate actions such as emergency interruption and selective firm load shedding, no agreement could be reached on the parameters which would necessarily need to be applied to such discretion. In essence the group could not be satisfied that the opportunity to bid gas via the flexibility mechanism, at times when supply was known to be restricted either via supply shortage or constraint, would not lead to excessive prices and one or two shippers holding the system to ransom. As a consequence no changes are proposed to the timing of suspension of the Code.

4.5 Emergency Contacts

This Review Group was not originally instigated with the intention of reviewing the requirements for emergency contact details, and its composition was drawn from a wider range of industry participants (Terminal Operators, Producers, DTI etc.) than would be appropriate for such a debate. It was however noted that the current requirements within Section Q were at odds with the requirements of Transco being administered through Customer Portfolio Management (CPM). The group therefore

agreed that the drafting in Section Q should reflect the current CPM requirements. This will also necessitate changes to Section G with regard to interruptible supply points.

4.6 General

The Review Group is of the opinion that it has fully discussed and resolved, as far as it believes possible, the issues raised for review within the Terms of Reference and that it appropriate to reflect the work of the group through a Network Code modification.