Development Workgroup Archive Report
Allocation of Unidentified Gas via the Distribution Networks Charges
Modification Reference Number 0232
Version 1.0

This Development Work Group Archive Report has been prepared by the Joint Office to document progress made to develop proposal 0232, prior to its withdrawal by the proposer due to reasons set out in an Ofgem letter to Gas Distribution Networks dated 23 February 2009 (see appendix 1).

This report is to remain in the Joint Office archive and not be issued to UNC Panel, as the aim of the report is to help facilitate the development of a similar modification proposal (if required), nearer to the time of the next Gas Distribution Price Control Review.

1 The Modification Proposal

a) Nature and Purpose of this Proposal

Introduction

This modification seeks to establish a Development Work Group to develop how unidentified gas can be apportioned to the shipping community using a mechanism similar to the one which is in place to recover shrinkage i.e. an agreed volume or value that can be recovered through the Distribution Charging structure from the Shipping Community. Consideration may also be given to developing, as an alternative mechanism, a “Line Loss Factor” to be apportioned to gas transported through Distribution Networks - leading to increased consistency between the gas and electricity distribution models.

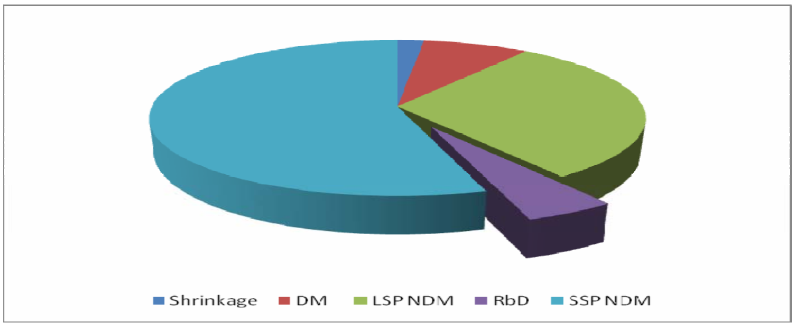
To ensure that appropriate behaviour by shippers is encouraged, the Development Work Group will also examine the potential for developing incentives to discourage the root causes of unidentified gas. For the avoidance of doubt the term unidentified gas refers to gas which is supplied to the GB gas network, but whose use cannot be accounted for.

The energy allocation regime

The current market arrangements for the GB gas market works on the principle of daily balancing. Only the total amount of gas consumed by GB as a whole along with the consumption of Daily Metered (DM) sites is known with any degree of certainty. Gas consumption for the majority of sites is estimated through a combination of algorithms and site categorization, based on historical consumption patterns.

The determination of gas consumption for any given day for Non-daily Metered (NDM) sites works on the principle that once DM and Transporter losses (Shrinkage) are subtracted from total GB consumption, whatever remains is consumed by the Large Supply Point and Small Supply Point NDM customers.

Allocation of UK Gas Consumption (not to scale).



Large Supply Point NDMs consumption is initially estimated via behavior modeling. When a meter reading for that site is obtained, the estimated consumption is corrected with any variation between estimated and actual gas demand being credited/debited to the Small Supply Point market. This correction volume is termed RbD volume.

It is important to note that the current process results in all unallocated energy remaining being assumed to be SSP consumption and allocated by the RbD process, though not by the RbD volume. This assumption does not allow allocation of unidentified gas to the LSP sector.

How significant any allocation errors are, is difficult to ascertain. The Development Work Group for Mod 0194 did not uncover any definitive evidence, though a body of anecdotal evidence does exist, indicating that some unidentified gas for the LSP market is being allocated to the SSP market.

Re-allocation of market error

Modification 0115/0115a attempted to allocate some measurement errors via RbD. Ofgem gave support to the general principle of spreading the costs of unallocated gas to all market players. In its Modification 0115 decision letter dated 24th October 2007 Ofgem stated that:

"we agree with the basic tenet of the proposals, that it is inappropriate for one sector of the gas market to bear all the costs of unallocated gas through RbD"

The decision letter went onto state that

"there are many issues which are currently contributing to the RbD charge, only some of which have been explored as part of these proposals and not all of these can necessarily be attributed to I&C shippers."

The Modification 0194 Development Work Group considered the use of

RbD to allocate such energy to the LSP market, but significant issues were identified in using this approach, in particular the allocation of genuine SSP consumption to the LSP market. One major risk identified is that this could create a cross-subsidy of the SSP sector and the size of the unidentified gas error would vary with total GB throughput.

With RbD not being considered a suitable mechanism, the Mod 0194 Development Work Group considered the way in which transporters take into account theft and leakages as part of their network responsibilities. These losses are currently estimated as discrete values based on analysis of network operations. In moving from a sliding percentage of total throughput to fixed volumes, Ofgem noted as part of its GDPCR consultation

"The evidence available shows that there is little correlation between shrinkage and throughput for the existing networks [1]". A fixed value was considered more appropriate.

We agree with Ofgem's analysis and so we propose to expand the current Shrinkage methodology to include areas of unidentified gas that have been traditionally allocated to the SSP market.

Our proposal

Widening of shrinkage scope

To help develop the analysis of the levels of unidentified gas, we propose that the current Shrinkage methodology be expanded to cover areas where gas is incorrectly allocated. Such areas include:

- **Late confirmation, Unregistered and orphaned sites.** It is our view that late confirmation sites do not add significant levels of unidentified gas, as sites which are confirmed at some stage will have their estimated consumption corrected. We recognize that in rare cases, late confirmation may occur where all of the energy may not be reconciled.
- Late Confirmation IGT. We recognize that the late confirmation of IGT sites is a more significant issue compared to DN sites and hence a separate value is created here.
- Shrinkage Errors. Such shrinkage losses that are not accounted for by the transporters' allowance.
- Theft and Unreported open By-Pass valves

Outside of the late confirmation IGT uplift, we have not made a distinction between IGT and DN sites, as we believe the issues that we have identified apply to all networks and there is no direct evidence that differentiation will enhance efficiency. In some cases, it is our view that this equal treatment is a benefit for the SSP market. For example, we believed that the majority of unregistered sites on IGT sites are SSPs.

Determining size of such factors

[1] http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=362&refer=Networks/GasDistr/GDPCR7-13

The costs for this shrinkage would be recovered from Shippers, effectively via an uplift to the Distribution Networks Distribution Charges.

This modification itself does not seek to determine the precise levels of unidentified gas that need to be allocated to this new mechanism. It is the proposer's intent that such values would be determined by the transporters.

b) Justification for Urgency and recommendation on the procedure and timetable to be followed (if applicable)

This modification does not require to be treated as urgent.

c) Recommendation on whether this Proposal should proceed to the review procedures, the Development Phase, the Consultation Phase or be referred to a Workstream for discussion.

It is our view that this modification should be considered by a Development Work Group.

2. Development Group Discussions

Meetings were held between November 2008 and January 2009 to discuss the development of Modification Proposal 0232, highlighting potential benefits and issues that would need to be resolved before the Proposal could be considered fully developed.

Draft High Level Business Rules

- Mechanism for allocating "unidentified" energy costs to Shippers/Suppliers using established shrinkage model processes and reflected as a new transportation charge.
- Facilitates Shippers/Suppliers passing on "unidentified" energy charges as additional transportation charges to customers, utilising existing contract conditions.
- The "unidentified" energy (VA) to be purchased will be calculated by a third party in line with the LDZ Shrinkage timescales, so initial proposals will need to be calculated by the 1 March.
- Each Gas Distribution Network (GDN) will be permitted to collect revenue to cover these costs.
- The price (PM) to be used to determine the level of allowed revenue will be based on ICE Natural Gas Futures Settle Price for the Month as @ 1st February of the relevant year.
- Therefore the amount of Allowed Revenue (UG) is:

$$UG = VA \times PM$$

- The recovery of Allowed Revenue (UG) back to the end user by GDNs is not to be prescribed but should utilise one of the existing rate codes.

- The purchased energy should be deducted from the initial daily allocation in line with DN Shrinkage in accordance with :

$$VD_n = \frac{VA}{365}$$

Issues to be Resolved

The development group explored a number of issues during its meetings and the most significant outstanding issues are listed below:

- May require a change to GDN licenses to enable the charges to be developed and implemented.

- May require the reopening of the 2008 GDN price control review (GDNPCR) due to the impact on the current "shrinkage" incentive scheme or could be included in a future GDNPCR.

- An "unidentified" energy allocation model is still to be agreed and developed to enable new transportation charges to be developed.

- Agree a process to agree to an independent third party who will develop the "unidentified" energy allocation model.

Conclusions

On 30 December 2008, GDNs wrote to Ofgem seeking their views on the impacts of proposal 0232 on the 2008 GDNPCR.

Ofgem responded (see appendix 1), that in its view the Proposal presented a significant change to the shrinkage arrangements which in turn would have required a reopening of the GDNPCR and they were unwilling to consider this appropriate for the purposes of proposal 0232. For these reasons Ofgem considered the proposal has little reasonable prospect of being accepted at this time and consequently, there would be no benefit in it proceeding further.

A number of presentations were developed by Total, Northern Gas Networks and Waters Wye Associates to support the development of proposal 0232 and these can be found with this report in the Joint Office document archive.

Appendix 1

Link to the Ofgem response held on the Joint Office website.

http://www.gasgovernance.com/Code/Modifications/ClosedMods/CM231-240/