Shrinkage Gas Arrangements

A paper by NGT for CIWG 14, 11th August 2004

1. Background

NGT has been asked to describe its proposals for shrinkage gas arrangements within the post DN sales commercial framework. NGT's original proposals are set out in the document "Network Code to Uniform Network Code, List of Changes, Discussion Document". These were presented to the RAWG on 27th January 2004. NGT expanded on the proposals at the CIWG meeting on 3rd March 2004. NGT also presented a paper "Current Price Control Treatment of Shrinkage" to DISG 15 on 3rd August 2004.

NGT believes its original proposals for dealing with shrinkage, with minor adjustment to reflect recent developments, remain appropriate.

This paper describes the existing shrinkage arrangements and the proposed future arrangements.

2. Existing Shrinkage Arrangements

The existing Network Code, Price Control and procurement arrangements for shrinkage gas are described below.

Network Code

Section N of the Network Code deals with shrinkage. There is a separate treatment of NTS and LDZ shrinkage.

NTS shrinkage arises due to measured own use (e.g. compressors), CV treatment and meter error. The amount of NTS shrinkage over time is the difference between NTS entry and exit allocations. The amount of NTS shrinkage on a given day is deemed by the Network Code to be (NTS throughput x NTS shrinkage factor). The factor is set daily such that NTS shrinkage quantities over time equate to entry allocations less exit allocations.
LDZ Shrinkage arises due to own use (e.g. gas heating), leakage and theft of gas. The amount of shrinkage for an LDZ on a given day is deemed by the Network Code to be (LDZ throughput x LDZ factor). The LDZ factor for each LDZ is set annually under a Network Code process that takes into account assessments of shrinkage within the LDZ. There is provision for reconciliation of shrinkage quantities in accordance with the LDZ Shrinkage Adjustments Methodology.

The factor for each LDZ is subject to a "pressure and temperature" adjustment. The purpose of the adjustment is to adjust transportation quantities allocated to NDM shippers by different amounts depending on LDZ, thus compensating for the fact that suppliers are required (as per the Gas (Calculation of Thermal Energy) Regulations) to calculate and bill for gas consumed based on prescribed standard pressure and temperature assumptions, irrespective of the geographical area in which the gas is supplied. The adjustments across all LDZs are such that the aggregate quantity of LDZ shrinkage gas remains unchanged. .

The Network Code allows Transco to hold a Shrinkage Provider account, enabling gas to be brought onto the system to meet shrinkage demands. Details of this account are as follows:

- Transco as Shrinkage Provider may act as a Network Code user for shrinkage gas purposes
- Daily inputs to the Shrinkage Provider account must be at the NBP
- Daily outputs are the NTS and LDZ shrinkage quantities, determined from throughputs and factors
- Shrinkage Provider pays imbalance charges, but not neutrality charges
- Shrinkage Provider does not pay transportation charges, but must acquire gas entry paid at the NBP

Price Control treatment

NTS shrinkage is covered by the NTS SO residual balancing incentive scheme. LDZ shrinkage is covered by an allowance in each of the eight DN formulae.

Procurement

In its March presentation to the CIWG, NGT stated that its procurement arrangements for shrinkage gas covered all shrinkage requirements for both NTS and LDZs (whether retained or sold) until 30 September 2005. These arrangements have since been terminated.

3. Proposed shrinkage arrangements

The proposed arrangements have been developed based on a "minimum change" approach for Network Code rules, but taking account of the principle that each gas transporter should be responsible for procurement to meet its shrinkage gas requirements, consistent with the price control arrangements. Key aspects of the proposed arrangements are set out below.

Multiple shrinkage providers

- Each gas transporter becomes a Shrinkage Provider for its own network(s)
- The Uniform Network Code will allow each transporter, as a Shrinkage Provider, to act as a Code user for shrinkage gas purposes

No change to Shrinkage Provider account arrangements

- Daily inputs to the Shrinkage Provider account must be at the NBP
- Daily outputs are the NTS and/ or LDZ shrinkage quantities, determined from throughputs and factors
- Shrinkage Provider pays imbalance charges, but not neutrality charges
- Shrinkage Provider does not pay transportation charges, but must acquire gas entry paid at the NBP

LDZ Shrinkage Factor

- LDZ factors will continue to be set annually in accordance with Uniform Network Code processes
- Each DN owner will be responsible for proposing revised shrinkage factors for the LDZs within its network(s), and for the reconciliation process
- The 2004/5 Gas Year LDZ Shrinkage proposals do not include pressure and temperature adjustments, on the basis that such adjustments distort the shrinkage quantities for individual LDZs and therefore cannot function in an environment of multiple network ownership.

No change to Price Control treatment of shrinkage

- NTS Shrinkage covered by NTS SO residual balancing incentive scheme
- LDZ Shrinkage covered by allowances in eight DN formulae

No interim shrinkage procurement arrangements (as previously proposed) are required as a result of the termination of NGT's long-term shrinkage gas purchase arrangements. Therefore the proposed arrangements can take effect from day 1.

4. Recommendation

It is recommended that the shrinkage arrangements described in section 3 be incorporated into the Uniform Network Code provisions.