



# **Final LDZ Shrinkage Factors Proposal for Gas Year 2006/07**

**Scotia Gas Networks  
1<sup>st</sup> September 2006**

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## **Final LDZ Shrinkage Factors Proposal for Gas Year 2006/07**

### **1 Purpose of Proposal**

The purpose of this paper is to present our final proposed LDZ Shrinkage Factors for the Gas Year 2006/07 as required under Section N 3.1.7 of the Uniform Network Code.

The paper also contains details of the representations made by Users to the Initial Proposals and our actions and responses to these.

### **2 Summary of Proposal**

We propose to apply the Shrinkage Factors outlined in the table below for the Gas Year 2006/07, effective from 06:00 hrs on 1 October 2006.

This proposal is derived from the Initial Proposals that were circulated to Ofgem and Users on 1 July 2006 – which followed presentation of the initial proposals at the Shrinkage Forum on 22<sup>nd</sup> June 2006.

#### **LDZ Specific Shrinkage Factors**

<b>LDZ</b>	<b>Leakage Factor</b>	<b>OUG Factor</b>	<b>Theft Factor</b>	<b>Shrinkage Factor %<sup>1</sup></b>
<b>Scotland</b>	<b>0.486</b>	<b>0.011</b>	<b>0.02</b>	<b>0.517</b>
<b>South East</b>	<b>0.642</b>	<b>0.011</b>	<b>0.02</b>	<b>0.673</b>
<b>Southern</b>	<b>0.675</b>	<b>0.011</b>	<b>0.02</b>	<b>0.706</b>

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<sup>1</sup> Shrinkage Factor is expressed as a percentage of anticipated annual LDZ throughput.

### **3 Development of Final Proposal**

Scotia Gas Networks (SGN) initial proposals for LDZ Shrinkage Factors for gas year 2006/07 were issued on the 1 July 2006. This followed the presentation of the initial proposals at the Shrinkage Forum on 22nd June 2006.

The Shrinkage Factors proposed within this document are derived using factors for leakage, theft of gas and operational usage (own use gas). A brief description of each of these elements is outlined below, with further detail contained within the Initial Proposal document.

#### **3.1 Leakage**

Leakage from the distribution system accounts for the majority of overall leakage within an LDZ and is attributable to gas leakage from mains and services. The leakage estimate has been derived from leakage rates obtained from the 2002/03 National Leakage Test programme (carried out by Transco) combined with measured Monoethylene Glycol saturation levels, annual average system pressures and mains and services population data.

In addition, leakage and operational venting may occur from Above Ground Installations (AGIs). During 2003, Transco completed a survey of these sites.

Leakage, in terms of cubic metres of gas, is converted into energy by use of the flow-weighted average CVs (measured in MJ / m<sup>3</sup>) that are detailed within the Initial Proposals.

It should be noted that SGN has updated its original leakage factors to take account of their ongoing mains replacement programme. The final proposals incorporate a change from using current (year end 2005) mains replacement data to including mains replacement up to the end of March 2007. This change maintains consistency in leakage factor methodology across gas distribution networks, better facilitating the comparison of Transporter performance.

Additionally forecast demand data was used for the gas year 2006/07 instead of the actual for the calendar year 2005.

#### **3.2 Operational Usage (also known as Own Use Gas)**

Following on from Advantica's recent review of their Own Use Gas (OUG) Model – SGN changed their proposed OUG factor (as described in a 'gas governance' email on 25<sup>th</sup> July 2006) in line with the national Factor produced by the model. This potential change was highlighted in SGN's 'LDZ Shrinkage Factors Initial Proposals' – released on 1<sup>st</sup> July.

The OUG factor in the initial proposal was 0.035%. This was unchanged from the 2005/06 factor, which was a compromise between the national factor produced by the Advantica model and the earlier Transco model.

Whilst verifying the model, Advantica's recent research, as presented to the Shrinkage Forum on Thursday 22<sup>nd</sup> June, stated that pre-heater efficiencies lie between 53-69%. This implies that the national factor calculated by their model is overstated, as this is based on an efficiency of 50%. However SGN's new proposed OUG factor for 2006/07 will be this national factor of 0.0113%.

### **3.3 Theft of Gas**

SGN proposes a theft of gas factor of 0.02% for 2006/07. This figure remains unchanged from the theft of gas factor for 2005/06 which was proposed by Transporters at the Shrinkage Forum on 15<sup>th</sup> August 2005.

This proposal was based on the strong view among Transporters that the National theft of gas factor of 0.03% of throughput significantly overstates the amount of theft that is attributable to Transporters. This stems primarily from the belief that the assumption that 10% of all theft is associated with the Transporters network is incorrect – available statistics and the fact that theft is much more likely to occur downstream of the Transporters network, support this view.

SGN recognise that that the quantification of the level of theft and proportion attributable to Transporters remains under review – both in the Shrinkage Gas Forum and Theft of Gas Forum.

## **4 Scotia Gas Networks Opinion**

We believe that the proposed Shrinkage Factors are consistent with the objective of using the best available information to estimate the LDZ Shrinkage for the period from 1 October 2006 to 30 September 2007.

## **5 Extent to which the Proposal would better facilitate the relevant objectives**

The proposal provides SGN's best forecast of the level of LDZ Shrinkage for the Gas Year 2006/07. The proposal is based on robust methodologies, the best information available and takes cognisance of the feedback received from Users.

This proposal is intended to further the efficient and economic operation of the system through more appropriate cost targeting and also facilitates the comparison of Transporter performance.

## **6 The implications for Scotia Gas Networks of implementing the Proposal**

Including:

### **a) Implications for the operation of the System:**

SGN is unaware of any such implications that would result from implementing this proposal.

### **b) Development, capital cost and operating cost implications:**

SGN is proposing a change the LDZ Shrinkage Factors which will correspond to a reduction in operating costs.

### **c) Extent to which it is appropriate for Scotia Gas Networks to recover the costs, and proposal for the most appropriate method for Scotia Gas Networks to recover the costs:**

The proposed change in LDZ Shrinkage Factors would lead to a reduction of costs for SGN.

Recovery of costs for shrinkage gas is part of SGN's operating costs as agreed for the Price Control Period 2002 to 2007.

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

No such consequences are envisaged should this proposal be implemented.

## **7 The implications of implementing this Proposal for Users**

This proposal improves the equitability and accuracy of cost targeting for Users.

## **8 Analysis of any advantages or disadvantages of implementation of the Proposal**

**Advantages:** More reflective of the actual transmission and distribution system usage and losses with improved cost targeting.

**Disadvantages:** SGN is not aware of any disadvantages.

## **9 User Representations**

Users have had the opportunity to comment upon our proposals during Shrinkage Forum meetings and in writing.

## **10 Programme of works required as a consequence of implementing the Proposal**

The only required modification is to the LDZ Shrinkage Factors entered onto AT-Link.

## **11 Proposed implementation timetable (including timetable for any necessary information systems changes)**

Under Network Code Section N 3.1.8., Users have until the 15 September 2006 to request that Ofgem issue a Condition 7 (4) disapproval of this proposal.

If the disapproval is not given, then the revised LDZ Shrinkage Factors detailed in this proposal will be implemented at the start of the Gas Day on 1 October 2006.

## **12 Recommendation concerning the implementation of the Proposal**

We recommend that the proposed LDZ Shrinkage Factors be implemented with effect from 06:00 hrs on 1 October 2006.

## **13 Scotia Gas Networks Proposal**

This report contains our proposal for the LDZ Shrinkage Factors for the Gas Year 2006/07. In summary, we propose that the LDZ Shrinkage Factors should be set at the levels indicated in the table on page 2 of these proposals.