From Angela Love, Scottish Power. Received 01 August 2017

The Allocation of Unidentified Gas Expert reviewed both the Imperial College study undertaken for Energy UK and the GDN response to it. The AUGE issued a letter on this, which is available on your website

- http://www.gasgovernance.co.uk/sites/default/files/ggf/page/2017-06/Final%20Factor%20Table%20Letter%2030%20June%2017.pdf. Contained within the letter are the conclusions of the AUGE's review, together with some recommendations.

I believe that the Shrinkage Forum should be considering these. For ease of reference I detailed the summary conclusions and exerts from end of the letter, which has some recommendations.

Summarised conclusions are as follows:

- 1. Shrinkage from CSEPs is not currently taken account of in the Shrinkage and Leakage Model (SLM) and hence should be accounted for in the UIG calculations.
- 2. Leakage from Medium Pressure (MP) mains is included in the SLM but the leakage rates are assumed to be the same as for Low Pressure (LP) networks. This assumption is likely to be invalid and will have an impact on estimates of Shrinkage for MP mains.
- 3. <u>Permeation of gas through PE pipelines is not included in the SLM and this may have an impact on its estimates of Shrinkage.</u>
- 4. Other conclusions drawn by Imperial College are either not valid or will have no material impact on Shrinkage.
- 5. <u>Consideration should be given to carrying out further leakage tests on PE and Medium</u> Pressure mains in order to enhance the accuracy of the SLM.

As a result of items 2 and 3 above, DNV GL has carried out a sensitivity analysis and concluded that

Shrinkage (excluding CSEPs) is currently under-estimated, but by a much lower amount than the $20\%\,$

proposed by Imperial College, primarily due to our rejection of some of their conclusions.

Whilst the AUG Expert has calculated these factors as accurately as possible within the constraints of the current methodology and terms of reference, they do recognise that there is an element of shrinkage error which should be assessed and included within these factors.

It is recommended that the industry take the opportunity to ensure that the issues of leakage from MP mains and permeation through PE pipes are further assessed and addressed as soon as possible.

I am happy with this e-mail being shared with the attendees, to give the GT's the opportunity to consider the elements listed above ahead of the meeting.