**Clarification of AUGE Response to Queries arising from AUGS Final Statement**

We believe that a number of our questions and issues raised during the previous consultation process have not been answered or have only partially been addressed. We re-state these issues below and would ask that they are properly and fully answered.

1. We believe that the AUGE has misunderstood the British Gas query relating to their failure to meet a high level objective. To clarify, British Gas is not stating that the AUGE's chosen method of calculating UG is incorrect. The methodology is fine; indeed as the AUGE correctly state British Gas supports a top-down approach to the calculation of UG. The top-down approach is correct since as the AUGE states:

   *"it was agreed between all parties that the quality of the theft data available was insufficient to allow this calculation to be robust."*

   Therefore the top-down approach was selected (and approved as a selection) on the basis that the AUGE (or any other party's) estimate of theft would form no part of the calculation methodology for the total UG.

   The issue is that the AUGE has not calculated the total UG and then subtracted the known elements to result in the balancing number as per the requirement of a top-down approach. The AUGE has instead added their estimate of theft to the known elements to result in an estimate of the total UG. This is contrary to the reasoning of selecting a top-down approach and in our view fails to meet the requirement to formulate a calculation of the total UG.

   We would question why the AUGE has stated an intention to adopt a top-down methodology but then applied a methodology solely reliant on their estimation of industry theft (added to the calculated elements of UG) to produce the total estimate of UG? This is a bottom up approach. The AUGE had specifically stated that this would not happen and it is universally accepted that this estimate is not robust. In a response to British Gas flagging this concern during the consultation process the AUGE stated:

   *"The new method will allow the level of theft to be estimated without being influenced by expectations of its likely magnitude, either on the part of the AUGE or any other interested party."*

   We are concerned that the above statement made by the AUGE during the consultation process has not been adhered to. The AUGE's proposed methodology was approved by the UNCC (subject to the satisfaction of specific concerns around accuracy) on the basis that what was stated in the proposed methodology would be realised. In our view it is not correct for the AUGE to state that they will perform a top-down calculation that would not be reliant on an estimate of theft by any party then deliver the opposite.

   The extract below highlights the AUGS reliance on the AUGE's estimate of theft:

   *"UG estimates higher than this necessarily result in very large volumes of gas being assigned to theft (because other elements of UG are calculated directly and remain constant). Higher estimates of UG lead to values for theft that are far higher than previously published and accepted values and which the AUGE considers to be unrealistic."*

   It is therefore clear that the AUGE has constrained the total scale of UG to be in-line with their non-robust estimate of theft. British Gas has repeated this concern throughout the consultation process and it is therefore inaccurate that the AUGE should state:

   *"The AUGE also notes that whilst British Gas commented on the split of theft between the SSP and LSP sectors in their response to the second draft of the AUGS, they made no objection to the total theft figure."*

2. The top-down methodology was agreed on the basis that the total UG would be calculated (from industry data). The AUGE have not calculated the total but have estimated it, thus have failed to meet the following high level objective:

   - To develop a methodology of calculating Unidentified Gas

   A top-down methodology requires the total to be calculated. The AUGE has not answered our concerns that the total UG has not been calculated. There is a clear distinction between calculation and estimation (and in fact the AUGE's estimation appears not to be based on industry data).

   Early in the consultation stage British Gas clearly highlighted how meter reads could be used to calculate the total quantum of UG. It is our belief that the AUGE has not done enough to utilise the available data in order to robustly calculate the total quantum of UG and therefore the element that is assigned to each sector.

3. The current industry allocation of UG is unfair. This is the reason for the appointment of the AUGE - to correct for this unfairness. Any under-measurement of the scale of UG or any lack of recognition of the scale of UG that is SSP-assigned initially has the effect of prolonging the residual unfairness by continuing to add cost to the mostly-domestic SSP sector.

   There appears to be no basis for the assumption that:

   *"All elements of the Balancing Factor other than Theft are either small or will sum to zero over time"*.

   We can see no logical reason why this statement should be true and the AUGE has provided no evidence to support this assumption. It is particularly important that the AUGE can provide evidence to support this because the allocation of theft (and therefore any other factors included in the number) is so biased against the SSP sector. We believe it is not reasonable for the AUGE to simply state *"this assessment remains valid"* with no evidence to support the claim.

   The AUGE has recognised that there are some non-theft elements included in the Balancing Factor that will not sum to zero over time and will therefore be incorrectly apportioned to the detriment of the SSP sector. We believe this approach is unreasonable. Should the AUGE not be capable of robustly measuring and assigning these elements they should be allocated across sector in proportion to consumption as a default rather than in line with theft; the factors share no common relationship with theft propensity and will relate more closely to consumption; there is no rationale that supports alignment with theft allocation. Furthermore we consider the AUGE's allocation of theft to be unsupported by the industry data available (which we believe suggests a different allocation).

4. Since the AUGE agrees that there is an element of SSP-assigned UG we find it unreasonable that the AUGE has not quantified this and included it within the AUGS. Lack of recognition of the SSP-assigned UG understates the total UG and continues the unfairness of sector cost allocation that the AUGE has been tasked with correcting.

   We do not accept that there is no evidence currently available to support the setting of the SSP-assigned UG percentage to "any given non-zero figure". Industry data is available, some of which is included within the AUGS. The AUGE recognise the existence of SSP-assigned UG; we believe that their failure to size it despite recognising its existence is not a valid reason for setting it to zero.

   The AUGE states that there *"is no basis for assigning some arbitrarily chosen small number"* yet has allocated zero. We do not request that the AUGE arbitrarily assigns the

volume of SSP-assigned UG (that is what it has actually occurred by assigning zero to the SSP sector and 100% to the LSP sector) but actually calculates it and includes it within the AUGS. A failure to do this despite recognising its existence is a failure to calculate correctly the total UG and the correct sector assignment. This failure has the effect of both understating the total UG and unfairly allocating cost to the SSP sector.

We do not believe the AUGE has used *"the long-term trend defined by the line of best fit"* if this results in a zero allocation of SSP-assigned UG. It is in fact statistically valid to isolate a single point with high positive scatter to demonstrate that in the measured period the allocation of SSP-assigned UG cannot be zero. On a broader point we are concerned about the application of statistical methods by the AUGE generally (another example is the AUGE's use of "null hypothesis" referred to in their latest response) and would request that the AUGE's use of statistical theory is peer reviewed by an independent practicing statistician in order to provide confidence to both the AUGE and Suppliers that statistical methods have been selected and applied appropriately.

If Figure 1 (contained within the AUGS) is not representative then why is it contained within the publication? If in fact other data is used for model bias then we have not been afforded the opportunity to review this as part of the consultation process. We believe this is contrary to how the process should work.

5. We would like clarification as to exactly what the AUGE means when they state:

   "*The allocation algorithm necessarily scales to AQ by its nature, and any model bias is a result of bias in the AQ values it scales to"*.

   "Meter wastage" is a term that is not contained within the AUGS, it is not clear what this means and this requires explanation by the AUGE. The new information presented relating to "retained meter" requires explanation as this is a fundamental part of the AUGE's methodology yet we have not been afforded the opportunity to review the detail as this has not been presented during the consultation process.

   We believe that it is a reasonable expectation that key data used to formulate the AUGS should be published and explained in detail whilst the consultation process is live.

6. Even when the AUGE presents this new un-explained data it shows that the trend line for SSP AQ reduction is more steep that that of LSP AQ reduction. Does this also imply there is an error in assigning zero UG to the SSP-sector?

7. The AUGE states:

   *"Whilst British Gas assert that they may find thefts more quickly than other shippers, over time thefts will continue to be identified for historic years even for those market areas where the detection rate is lower. The cumulative effect of this will eventually provide a realistic split of SSP/LSP theft as more of the 'unknown theft' is detected."*

   Are the AUGE stating that they acknowledge that the allocation of SSP/LSP theft (and therefore the Balancing Factor) is currently biased by British Gas detecting more theft in SSP sites but that this will correct over time? This seems to be what is suggested. If so then we believe this is an unreasonable approach to the current allocation of theft across sectors as it suggests that it is acceptable to over-allocate cost of theft to the SSP sector in the current year/s. Sufficient data exists to calculate the allocation correctly and therefore it should be used.

   British Gas reasserts that the AUGE is required to remove any bias from data before utilising it to allocate theft across sector.

8. The AUGE states:

"*During the preparation of the AUGS the LSP shippers asserted that they carry out pre-customer checks before taking on new customers, implement regular metering services, etc. and this has been summarised in the AUGS"*.

What is the purpose of this statement? Have the SSP shippers been afforded the same opportunity to so assert? British Gas are a full CAIS member with Experian credit referencing agency, have a dedicated Risk function and a large field-based Theft team. British Gas would specifically like the AUGE to answer how many of the LSP shippers mentioned above are full CAIS member with Experian?

9. The AUGE states:

   *"There is a view within the industry that customers who steal gas are likely not to switch shippers in case they get found out, with the result that they stay with the incumbent shipper, i.e. British Gas. Hypothetically, British Gas may well detect a higher level of LSP theft in their client base because they have more LSPs that steal gas compared to the rest of the market".*

   British Gas would like the AUGE to publish the evidence that reinforces the inclusion of the above statement in their response. If no such evidence exists then British Gas would like to understand why the AUGE has chosen to associate with the above "view" and rejected competing "views". If the AUGE is basing its estimation on ideas like this our view is that it will be incorrect. The logic fails in any event as it would suggest that British Gas would detect disproportionately more SSP theft than LSP theft. This raises a more general concern over whether there has been a tendency towards maintenance of the status quo i.e. if there is any uncertainty as to how cost should be exactly allocated then it remains within the SSP sector.

10. British Gas in their latest response state that:

    *"The only correct method of allocating theft instances across sector is to effectively re-calculate the AQ taking into account metered and un-metered (theft) consumption when doing so. This new AQ value can then be used to allocate the associated theft volume to sector."*

    The AUGE appears to have misinterpreted this statement to mean "*current AQ plus annual estimate of theft"*. As such the AUGE has answered a question not posed by British Gas whilst not answering the specific query raised. We would request that the AUGE answer the query as put to them.