

## **Energy UK Response to the consultation on the first draft Allocation of Unidentified Gas Statement (AUGS) for 2013/14**

**14 June 2012**

Energy UK represents a wide spectrum of interests across the sector. This includes small, medium and large companies working in electricity generation, energy networks and gas and electricity supply, as well as a number of businesses that provide equipment and services to the industry.

Energy UK is pleased to respond to the consultation on the first draft AUGS for 2013/14. This is a high level industry view and our members may also provide individual responses.

### **1) Methodology**

The top-down methodology was agreed on the basis that the total Unidentified Gas (UG) would be calculated from industry data. Included within this calculation would be the total UG initially assigned to both the Large Supply Point (LSP) and Small Supply Point (SSP) sectors. To date the Allocation of Unidentified Gas Expert (AUGE) has not calculated the total but has estimated it and then only for the LSP sector. However, we were pleased to learn at the recent UNCC meeting that the AUGE does intend to acquire and utilise sufficient data in order to meet the high level objective, namely:

- To develop a methodology of calculating Unidentified Gas

We are encouraged by the AUGE's stated aim to utilise meter read data to calculate the total quantum of UG and also the portion that is initially allocated to the SSP sector. We believe this will yield a more accurate result than the existing methodology. We are further encouraged by the AUGE's commitment to assess each methodology for the statistical confidence level and to utilise this basis for selection; in addition the AUGE has committed to make transparent that decision process.

***Energy UK recommendation: that the AUGE's use of statistical method is peer-reviewed for completeness.***

***Energy UK recommendation: that the AUGE's interpretation of the MOD81 data is reviewed by Xoserve to ensure that the interpretation is correct.***

***Energy UK recommendation: that the AUGE considers whether there is any additional information that could be provided through the MOD81 report that would help in its analysis.***

### **2) Default Allocation**

Historic allocation of UG was inaccurate and inequitable, as recognised and acknowledged by Ofgem. This is the reason for the appointment of the AUGE - to correct for this inequity. The current new

allocation through the AUGE is an improvement, but still requires additional refinement to address the inaccuracy and ensure equitable treatment of costs. 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 inequity and inaccuracy by continuing to add cost to the mostly-domestic SSP sector.

It is for this reason that we raise concerns around the AUGE's expressed desire to "*err on the side of caution*" when using consumption-based analysis to derive total UG and sector-assigned UG. We would request that the AUGE utilises all available data to derive the best possible outcome. We accept that on occasion the available data may be lacking or robust conclusions cannot be drawn. In this case we would suggest that the default allocation be sector proportional to consumption (or another reasonable proportion) rather than to continue to allocate all cost to the SSP sector.

We are concerned that the AUGE continue to state that there is a natural bias in the allocation algorithm when we believe it has been proved not to be the case. We believe that, with the inclusion of the Annual Quantity (AQ) review results from 2011, the natural bias will be demonstrated beyond doubt.

We are extremely concerned that in the latest AUGS the AUGE has considered removing an LSP theft record to affect the allocation of the balancing number:

*"The question then arises as to whether this is a one off or an underlying trend and whether it should be included in the calculation of the split in theft or not"*

We find the consideration of the removal of this record to alter the allocation of theft (and therefore the balancing number) unacceptable.

We are reassured by the AUGE's recent clarification that no records have or will be removed, but remain concerned that a record removal was given consideration.

### **3) SSP Assigned UG**

Since the AUGE agrees that there is an element of SSP-assigned UG, we find it unreasonable that the AUGE has not currently quantified this and included it within the AUGS. Lack of recognition of the SSP-assigned UG understates the total UG and continues the inequity of sector cost allocation.

We do not accept that this element is likely to be small and we would encourage the AUGE to utilise the available industry data to correctly size this element prior to publicising its likely scale.

Only when the SSP assigned UG is calculated will we have a reasonable view of the total UG.

### **4) Theft Sector Apportionment**

We believe 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 consumption when doing so. This new AQ value can then be used to allocate the associated theft volume to sector.

We are encouraged that the AUGE has stated that it will review this suggestion again as to its suitability in light of recent clarification.

We do not believe that the AQ value immediately preceding the estimated theft start date is a reliable indicator as to sector apportionment of subsequent theft volumes. We have still not seen any data that would give us cause to review this position.

We cannot see a situation in which an amount of gas stolen within a gas year that exceeds 73,200KWh can be assigned to the SSP sector, and this is not a reasonable outcome for any allocation methodology.

In addition we believe that the AUGE has not yet corrected for bias within detection rates. We do not accept that this will eventually even-out – this could only occur if every instance of theft is detected and done so within a time period that is utilised for consideration by the AUGE, which is practically impossible. If the LSP sector does not make attempts to detect theft and the SSP sector does then the detection data will inevitably be skewed toward SSP detections. To then use this data to allocate the balancing number without correcting for disproportionate effort will, in our view, lead to an over-allocation of the balancing number to the SSP sector.

We welcome the AUGE's commitment to review the methodology for the allocation of the balancing number.

When theft is carried out, the volume that is not recognised in the settlement process will be smeared to the SSP sector as it occurs. Where the theft occurs at an SSP site the Shipper will have taken some of the smear through Recalculation by Difference (RbD). However, where the theft occurs at an LSP site the Shipper will never have had any smear of the costs, nor will they ever be accountable for the gas that has been stolen, despite the fact that they may have been able to recover revenue from the consumer.

***Energy UK recommendation: The AUGE should consider this in light of the fact that SSP Shippers contribute to theft in their sector through RbD as it occurs and also on a forward-looking basis through the AUGS. Consideration of this should be taken with reference to any implications there are to SSP Shippers, given that the LSP Shippers only contribute on a forward-looking basis and also retain revenue with no associated cost for the prior period. This could be a significant issue given the volumes involved.***

## **5) The Scale of the Balancing Number**

In the previous AUGE year "Theft & others" accounted for 76% of the aggregated estimate of UG. We feel that this is a large proportion of the total and efforts should be made to further identify and size the component parts.

We would suggest the following as a starting point, ensuring that if materiality is found then a reapportionment should be assigned to the appropriate sector:

- Asset and meter data inconsistencies
- Poor meter-reading performance – Xoserve have provided information (albeit 1 month analysis) that demonstrates the following performance figures for Jan 2011/2012
  1. against the 90% target; 74% of monthly read meters were read,

2. against the target of for January 2011; 95% of Annual read meters were read.
- Non Calculating AQ's (particularly LSP) Xoserve have provided information in that indicates 67% performance levels for LSP sites, and 83% for SSP. Given the UNC obligation on meter reading performance it is clear that there are issues in this area.

## **6) Independent Gas Transporter Connected System Exit Point (IGT CSEP)**

Operational data available from Xoserve shows that the majority of CSEP reconciliations (LSP sites only) result in net credits to the LSP sector. While one would expect the accompanying consumption figures to reduce LSP AQs, data provided by Xoserve after or towards the end of the publication of the 2011 AUGS (CSEP AQ by EUC) shows LSP CSEP AQs rose sharply in 2010. While we acknowledge that this data includes new and removed supplies (i.e. not exclusively "Retained Meters"), it would appear to be beneficial for the AUGS to make use of this, and any other available data when revisiting the Allocation Algorithm Bias topic.

***Energy UK recommendation: Given the scale and prolonged period that the IGT CSEP issue has been ongoing and because we believe the potential causes of UG in this area have not been fully explored within the 2011 or 2012, AUGS further analysis should be carried out.***

Another related area which may not have been considered in the 2011 AUGS due to data provision issues is the AQ calculation performance of IGT sites; both for SSP and LSP. Data to assist in analysis of this area should be available from IGTs (meter point level) and from Xoserve (CSEP level) and could provide insight, as similar data for Large GT sites has done.

***Energy UK recommendation: A similar data analysis to that carried out for Large GT sites could be carried out for IGT sites.***

Given the number of unreconciled LSP LMNs within the IGT Portfolio, we believe it would be appropriate for the AUGS to consider the amount of energy (and associated UG) being "lost" by the progressive advance of the settlement close-out window in relation to IGT LSP sites. With proposals to reduce this to 2-3 years or 3-4 years (Mods 395/398), this volume of un-reconciled error is increasing and further investigation into this area would, we believe, be beneficial.

***Energy UK recommendation: The AUGS should investigate these issues as fully as they can and consider the implication this has had on settlement and UG.***

## **7) LSP NDM Metering Errors – Drift**

The AUGS states that very little work has been done in the field of accurately assessing meter drift over time (pg 54 2011 AUGS) however then goes on to assert that available data and anecdotal evidence (which is not provided) suggests drift associated with diaphragm and turbine meters is likely to be up or down and results in a net bias of zero. The AUGS also states that LSP sites and Offtakes are less likely to drift and, where drift is identified, it is equally as likely to be over or under-recording.

This appears to contradict anecdotal evidence provided by SOHN Associates that there could be very many LSP meters more than 20 years old that are under recording and through the reporting of Measurement Errors in the Offtake Arrangements workgroup (see table below) which all suggest that

turbine meter drift is more frequently an under-recording of gas, caused by the corrosion/degradation of rubber seals or bearings within rotary and turbine meters.

**Table 1: No of LDZ Oftake Measurement Errors associated with Turbine Meters**

Nature of Error	No. of Measurement Errors	%
Over Recording	6	24%
Under recording	14	56%
Negligible	5	20%
<b>Total</b>	<b>25</b>	<b>100%</b>

**Source: LDZ Oftake Measurement Error Register & Joint Office website**

The [Uncertainty Analysis MRG](#) published by the Environment Agency in 2007 states in Annex I that the expected lifespan of rotary, turbine and bellows gas meters is 25 years. Xoserve data on meter capacity utilised by the AUGÉ in the 2011 analysis shows that 3.88% of NDM LSP meters were fitted more than 25 years ago and that these meter points have associated AQs totalling 6,275 GWh.

We believe there exists an opportunity to investigate another potential area of UG.

**Energy UK recommendation:** *Given that there has been very little work done on meter drift with respect to meter age we would expect the AUGÉ to analyse the raw data associated with the table below with respect to possible and probable meter error.*

**Table 2: LSP NDM Meters by period during which Meter Fit occurred**

Meter Fit Period		Meter Count	%	Aggregated AQ	%
> 25 Years	Pre 1960s	4	0.00%	137,046	0.00%
	1960s	1,644	0.36%	943,017,059	0.80%
	1970s	2,003	0.44%	1,413,749,558	1.20%
	1980s (>25 years)	14,174	3.09%	3,918,086,713	3.34%
	<b>Total &gt;25 Years</b>	<b>17,825</b>	<b>3.88%</b>	<b>6,274,990,376</b>	<b>5.35%</b>
< 25 Years	1980s (<25 years)	13,918	3.03%	2,600,813,934	2.22%
	1990s	153,857	33.50%	33,606,844,239	28.63%
	2000s	189,616	41.28%	44,964,333,467	38.30%
	2010s	84,114	18.31%	29,945,369,638	25.51%
	<b>Total &lt;25 Years</b>	<b>441,505</b>	<b>96.12%</b>	<b>111,117,361,278</b>	<b>94.65%</b>
<b>Grand Total</b>		<b>459,330</b>	<b>100.00%</b>	<b>117,392,351,654</b>	<b>100.00%</b>

**Source: Meter Capacity Report, AUGÉ Data Provision 2011, Xoserve UK Link Documentation**

Xoserve hold data relating to reconciliations required for sites where a check read has occurred and drift has been identified, therefore the AUGÉ can use this information.

**Energy UK recommendation:** *AUGÉ to identify whether or not a correlation exists between the size of drift and meter 'age' which could be applied to the aged LSP NDM meter portfolio?*

## **8) DM - Temperature and Pressure (T&P) Conversion Factors**

It is the case that complex metering systems including flow computers and associated equipment are common at large DM sites.

Xoserve recently identified a number of Daily Metered sites which were incorrectly assigned the default T&P factor of 1.02264, This is the standard factor for meters having an annual consumption of <732,000 kWh. All sites with AQ >732,000 kWh both Daily Metered and Non-Daily Metered should be assigned a site specific calculated T&P factor<sup>i</sup>.

Prior to the introduction of competition in metering in 2004 responsibility for calculating and assigning the site specific factor lay with the gas transporter, however this is no longer the case. We would suggest that the AUGE may wish to investigate the integrity of the current process for ensuring that site specific T&P factors are appropriate. We would also be interested to know whether the population of automatic temperature and pressure conversion equipment has changed markedly since 2004. A reduction in the utilisation of automatic T&P equipment will of course lead to more reliance on the calculated T&P factor.

---

<sup>i</sup> The Gas (Calculation of Thermal Energy) Regulations 1996.