

AUGE Response to Queries Arising From 1st Draft 2012 AUGS for 2013/14 Consultation

Queries From	Energy UK
Date Received	15 th June 2012
Date of Response	12 th July 2012

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.

Response:

We have always acknowledged that the methodology for 2012/13 does not account for the LSP-arising UG assigned to the SSP market by the allocation process, but this method was the best that could be produced given the data available to us at the time. The AUGE is committed to providing the best estimate of UG possible and will do this objectively without favouring any party. We therefore share the industry's view that should the meter read based approach be

feasible, it will be the best method to use, and if it proves successful it will be used in the production of the 2013/14 figures.

It should be noted, however, that even when using meter read data, the UG figure produced will still be an estimate. UG, by its very nature, cannot be directly measured or calculated, and there would be no need for the existence of an AUGE if it could be. It is therefore the job of the AUGE to *estimate* the UG total as accurately as possible and this is what we hope to do with the meter read data.

Even if accurate meter reads were available for every meter, the final figure for total UG would still be an estimate because it is dependent on Shrinkage (due to the fact that under this methodology, UG is estimated as total LDZ load minus the sum of Shrinkage, metered DM load, metered SSP load and metered LSP load). Shrinkage in itself is modelled and hence an estimate, meaning that UG is also an estimate.

In reality, only a sample of meter read data will be available and valid (albeit a sample covering the majority of the population), meaning that the population load will have to be estimated from the sample load (e.g. by multiplying the sample load up pro-rata by population, or by using AQs for missing meter points instead of metered loads, etc). This is again a process of estimation, resulting in the final UG figure being an estimate, which is why it will be accompanied by a Confidence Interval. If the final UG figure was *calculated*, no CI would be necessary or even valid.

Therefore, whilst the AUGE shares the industry's views on the use of metered data, we believe it is important that it is understood that even this method (and indeed any method) can and will only ever lead to an estimate of UG and not an absolute calculated figure.

The AUGE also supports peer review of the method as long as such a move is supported by the UNCC. Should such an approach be approved, it would clearly be inappropriate for the AUGE to appoint the reviewer and therefore such an appointment should be made by the UNCC/Xoserve/Ofgem as and when this approach is approved. The terms of reference for such a reviewer should also be clearly defined as reviewing a statistical method in isolation is one thing, but fuller understanding of the domain and methodology is probably required to be able to competently assess it.

The AUGE understands that the industry wishes to ensure that Mod81 data is applied correctly, and agree that this is essential to the approach used to produce the 2012/13 UG figures. The AUGE works closely with Xoserve to ensure that appropriate data is used at all times and that it is fully understood, and further communication has taken place specifically regarding the issue of the exact understanding of Mod81 data. It should be noted, however, that this will no longer be an issue if the meter read based approach is successful, as this will supersede the approximation that is based in part on Mod81 data.

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 AUGÉ'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 AUGÉ 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 AUGÉ 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 AUGÉ 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 AUGÉ's recent clarification that no records have or will be removed, but remain concerned that a record removal was given consideration.

Response:

The phrase "err on the side of caution" in Section 4.3 of the AUGS do not refer to the figure that would be set using this approach, but to the decision of whether to set a non-zero figure or not. This can be seen when the full phrase "hence it will be necessary to err on the side of caution in drawing any conclusions" is seen in context.

The reason for this caution is because under this scenario we would be considering setting a non-zero percentage figure for SSP-assigned UG despite the fact that the evidence in favour of such an approach fell short of what was required for statistical significance. Clearly we would still only take such action if the balance of probability strongly supported it. As a theoretical example only, consider a case where an 85% Confidence Interval for UG did not include zero, but a 95% CI did (this is possible because the higher the confidence required, the wider the interval). In this case, the null hypothesis H_0 (that the SSP-assigned UG percentage is zero) cannot be rejected because the observed SSP-assigned level from the sample is not significantly different to zero. The balance of probability strongly suggests that the SSP-assigned UG percentage is non-zero in this example, however, even though the level required for statistical significance has not been reached.

Therefore, in such a case we would consider setting a non-zero percentage for SSP-assigned UG, with that percentage based on the best estimate from the sample rather than any other figure.

If we consider a case where the CI is much wider, the situation is different. Under this scenario, whilst the best estimate figure of SSP-assigned UG that arises from the meter read sample is non-zero, the level of uncertainty in the estimate means that the chances of this apparent difference having occurred simply by chance are high, and hence the probability of the actual SSP-assigned UG figure being zero are also high. In such a case there would be no justification for assigning a non-zero percentage to SSP-assigned UG.

Therefore, given that we are working outside the realms of statistical significance in this situation, it is of course necessary to attempt not to err at all, but if we are to err, it must be on the side of caution (i.e. we do not erroneously reject H_0). This is reflected in only setting a non-zero SSP-assigned UG percentage when the balance of probability clearly suggests it, and the AUGÉ maintains the position that this is the correct approach to take. It is acknowledged, however, that the wording in this section may have suggested to the reader that the final figure itself would be cautious as opposed to the decision to set it to a non-zero value, which was not the intention of the statement.

With regard to the allocation algorithm bias, it is important to note that should the meter read based approach be successful, this element of the calculation will be superseded and therefore this will be a moot point. Should the new approach prove unsuccessful, however, it will be necessary to continue to include algorithm bias in calculations. The current method, which includes algorithm bias, is based on both RbD and AQ shift trends over a number of years, and as such an isolated value from a single year cannot be presented as proof that a bias or trend does not exist. The AUGÉ has noted that in 2011 the SSP market sector AQ dropped by more than that for the LSP sector, but this followed four years where the opposite was true.

Given that the job of the AUGÉ is to predict UG for the coming year, it would be invalid to do this based on a single figure from 2011, particularly when there was a consistent opposite trend for several previous years. The level of variation around the trend lines for SSP AQ drop and LSP AQ drop mean that individual years where the SSP drop is greater than the LSP drop can occur within the context of the longer term trend of greater LSP drop simply by chance, and there is therefore no statistical justification to reject the existence of the trend based on such a single point.

The 2011 figures do affect the best estimate of the trend and will lead to a lower estimate of algorithm bias should this element still be required in the UG calculations. Values for this one year cannot, however, be used to reject the existence of the trend as illustrated above.

The AUGÉ also maintains its position that considering the large LSP theft record for removal was appropriate, and that the decision to retain it was also appropriate. The calculations in the AUGS are designed to estimate UG for the coming year rather than for previous years, although by necessity the methods for doing this are based on historic data. Therefore, if the large LSP theft constituted a freak occurrence that could not occur or was extremely unlikely to occur in 2013/14 (the year for which we are estimating UG in the latest AUGS), then it would be appropriate to remove it – this is because under such a scenario the fact that the theft occurred in the past would have no bearing on the chances of a similar theft occurring in the future.

It was therefore valid for the AUGÉ to consider whether this was the case, or whether it was the case that the large LSP theft constituted a situation that could reasonably occur in 2013/14. It was concluded that conditions for LSP theft had not changed to any extent that would preclude such a circumstance occurring again, and so the decision was taken to retain the record for training the theft algorithms. The fact that it was found to be appropriate to retain the record does not mean it should never have been considered for removal, however. It is appropriate for the AUGÉ to scrutinise all unusual records in this way, regardless of what market sector they arise from.

One action arising from the UNCC meeting on 19th May 2012 regarding this particular record was to check that it was a downstream theft and not upstream of the meter.

Xoserve has since informed the AUGÉ that this particular site is unregistered and has been for the full duration of the estimated theft. The consumption is being back-billed by the relevant GT and will be passed back to the shippers via the “K-mechanism”. In addition, we understand that the thefts occurring at unregistered sites downstream of the meter form part of shrinkage (according to the Gas Code/TPD).

We have therefore requested further details from Xoserve concerning not only this site but any other theft records associated with unregistered sites and clarity on the treatment of such sites in the Gas Code/TPD.

If this is confirmed then there is a case for such records to be removed from our theft split analysis since they do not constitute downstream theft but form part of shrinkage.

Furthermore, we would expect all Shippers to argue very strongly that had those sites been registered to a Shipper then they would have had the opportunity to detect theft (if indeed they are thefts rather than just registration issues) and should not be penalised for something that is outside of their control.

As noted above investigations are ongoing and a final decision has not been made at this time.

3) SSP Assigned UG

Since the AUGÉ agrees that there is an element of SSP-assigned UG, we find it unreasonable that the AUGÉ 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 AUGÉ 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.

Response:

The Unidentified Gas estimate is, by necessity, based on the data that is available at the time the calculations are made. In the case of the 2011 AUGS for 2012/13, data that would allow the quantification of SSP-assigned UG was not in our possession, and so the best estimate of total UG was made within this constraint. The AUGÉ acknowledged this constraint at all times and also proposed a full solution in the 2011 AUGS for 2012/13 that would allow SSP-assigned UG to be calculated for future years. That method has been developed and is presented in the first draft of the 2012 AUGS for 2013/14, and analysis in the area is ongoing.

It should be noted, however, that the AUGÉ does not necessarily agree that there is an element of SSP-assigned UG. The AUGÉ believes it is *likely* that this is the case, but the data analysed in all UG calculations to date gives no definite indication of its existence. In addition, the AUGÉ only stated its *belief* that the magnitude of SSP-assigned UG was likely to be small should it exist. The AUGS stated clearly that this was a belief only, based on an analysis of likely scenarios, and was not based on rigorous statistical analysis due to lack of data in the area.

The AUGÉ remains committed to estimating UG as accurately and as objectively as possible without favouring any party, and the quantification of SSP-assigned UG (should it exist) forms part of this commitment. This analysis will be carried out and presented in the 2012 AUGS for 2013/14 as long as the data is of sufficient quality to allow this.

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 AUGÉ 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 AUGÉ 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 AUGÉ, 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 AUGÉ'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 AUGÉ 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.

Response:

All elements of the UG calculation can and will evolve as and when better data is available or improved estimation methods are discovered. The investigation of a new method for calculating total UG using meter read data (as discussed above) is a good example of this. At this stage of the analysis (i.e. whilst results from the meter read analysis have not yet been obtained) the theft calculations have evolved more than any other area.

In the 2011 AUGS for 2012/13, pre-theft AQs were used as these were considered to be the most accurate available at the time. This decision was taken on the basis that consumption patterns or indeed the consumers themselves are likely to change post-theft, so these cannot be viewed as representative of the natural AQ of the site at the time of theft. Meter read dates for the theft sites were unknown, so it was not possible to reliably add theft to the immediate post-theft AQ because the degree to which the theft had affected the AQ was unknown. This left pre-theft AQ as the most reliable data source available.

The AUGS is committed to improving the methodology further, however, and with meter read data now available, this opens the possibility of calculating theft-inclusive AQs for any theft-affected years for each site. This analysis will be carried out and the results included in the 2012 AUGS for 2013/14. The AUGS also accepts that any site with a theft of over 73,200Kwh must by definition fall into the LSP market and this will also be included in the new analysis.

As part of this we are writing to the industry participants for information on how they estimate theft and durations of theft.

It is recognised that the pre-AUGS RbD system created a lack of financial incentive for LSP shippers to pursue theft, whilst the incentive for SSP shippers remained (in that it was the only way to recoup the cost of stolen gas),. The AUGS also notes, however, that an unfortunate side-effect of quantifying theft and allocating it between sectors in the AUGS (which the AUGS has to do to fulfil its obligations) is to disincentivise both sectors. This is because any shipper detecting a theft will add to the number of thefts detected in their own market sector and hence increase the proportion of unknown thefts also assigned to that sector in the AUGS calculations. Under the new system any shipper that works in a single market sector is therefore disincentivised equally. By the same token, the activities of mixed shippers will directly influence the split of Unknown Theft in the UG calculations because if they concentrate their detection efforts in a particular market, this will subsequently affect the LSP/SSP split that is applied to Unknown Theft.

This situation is clearly undesirable, and the AUGS is actively investigating alternative methods of splitting theft that do not rely on data that can be affected by external influences. This necessarily means looking at alternatives to using detected theft as a basis for this split. If an alternative solution can be successfully implemented, this means that any bias within the detection rates becomes academic because it will no longer affect the UG calculations.

5) The Scale of the Balancing Number

In the previous AUGS 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
 - against the 90% target; 74% of monthly read meters were read,

- 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.

Response:

We will look into these once the consumption analysis has completed as the outcome will determine whether the Algorithm Bias method continues or not and therefore which of the issues raised above remain relevant.

We would like to discuss the issue of asset and meter data inconsistencies referred to here further to understand what specific inconsistencies these refer to.

Whilst we can look at the potential impact of these issues in terms of the methodology and estimating UG, the responsibility for resolving them (i.e. non-calculating AQs and poor meter reading performance) lies with the industry.

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.

Response:

As per the previous response, we will look into this once the outcome of the consumption analysis is complete.

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.

Response:

As per previous response regarding the outcome of the consumption analysis. In addition, we believe that is unlikely that we would be able to obtain meter point data from the iGTs.

However, if we decide to look into the AQ performance in more detail we will write to the iGTs for such data.

Given the number of unreconciled LSP LMNs within the IGT Portfolio, we believe it would be appropriate for the AUGÉ 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 unreconciled error is increasing and further investigation into this area would, we believe, be beneficial.

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

Response:

At this time the focus is on the major components of UG, although we will consider this alongside other new topics covered in this consultation response once those activities have concluded. We may require further discussions at that time to understand the particular issues and what data is available – again data from iGTs is generally limited.

7) LSP NDM Metering Errors – Drift

The AUGÉ 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 AUGÉ 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 Offtake Measurement Errors associated with Turbine Meters

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

Source: LDZ Offtake 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	1644	0.36%	943,017,059	0.80%
	1970s	2003	0.44%	1,413,749,558	1.20%
	1980s (>25 Years)	14174	3.09%	3,918,086,713	3.34%
	Total >25 Years	17825	3.88%	6,274,990,376	5.35%
< 25 Years	1980s (<25 Years)	13918	3.03%	2,600,813,934	2.22%
	1990s	153857	33.50%	33,606,844,239	28.63%
	2000s	189616	41.28%	44,964,333,467	38.30%
	2010s	84114	18.31%	29,945,369,638	25.51%
	Total <25 Years	441505	96.12%	111,117,361,278	94.65%
Grand Total		459330	100.00%	117,392,351,654	100.00%

Source: Meter Capacity Report, AUGE 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 AUGE can use this information.

Energy UK recommendation: AUGE 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?

Response:

The AUGE welcomes suggestions for development in the Meter Error calculations, as this is the area with the least available background data of all the directly calculated elements of UG. This element of UG is small (contributing 0.26% of the UG total in the 2011 AUGS for 2012/13) but this does not mean it should be ignored.

The breakdown of LSP meters by age provides a useful profile of the population, but it does not in itself allow a comparison of meter age and drift to be made. In order for this to be done, drift data, also split into the age bands given in Table 2 will be required. Table 1 gives a start point for drift data, but a lot more information would be required in order for an age vs drift comparison to be made. The data would need to include

- Actual recorded drift figures for each meter rather than data summarised into the categories “over-read”, “under-read” and “negligible”. The raw data is particularly important given that the definitions of the categories in Table 1 (i.e. where do the thresholds between “negligible” and “over-read”, and between “negligible” and “under-read”, lie).
- The age of each meter.
- The type of each meter (turbine/diaphragm).
- A much larger sample than the 25 meters covered in Table 1. As indicated above, the sample should cover both diaphragm and turbine meters and hence include meters from LSP sites rather than just LDZ offtakes.

Should such data exist, the AUGE would welcome the opportunity to use it to improve the Meter Error estimate.

With regard to the number of meters exceeding their intended lifespan, the above data would also be required in order to extract any useful information from this area. This is because there is currently no information as to what effect the degradation of the meter beyond 25 years is expected to have on its performance (i.e. does it typically develop a bias in one direction or the other, and if so, how much). The age vs drift analysis described above will provide this information, which would then allow UG estimates from meters exceeding their intended lifespan to be made.

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.

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.

Response:

Inappropriately set T&P factors have the potential to lead to Unidentified Gas if they result in consistent under-reads in (a subset of) the meter population. At the moment it is unclear whether sufficient data exists to carry out a robust analysis in this area. The AUGE will therefore liaise with Xoserve in order to assess what data can be made available. The approach taken will depend on what information can be supplied.

Note however, that it is not the AUGE's responsibility to investigate the integrity of gas industry processes and procedures. These should be investigated and addressed by the relevant industry governing bodies. It is our responsibility to estimate UG and apportion to the appropriate market sector.

Queries From	ScottishPower
Date Received	15 th June 2012
Date of Response	12 th July 2012

Please see the consultation feedback letter and appendix from ScottishPower on the Joint Office of Transporters website for further details. The AUGÉ responses are covered in the Energy UK consultation responses above.

Queries From	Scottish and Southern Energy and British Gas
Date Received	15 th June 2012
Date of Response	12 th July 2012

The Scottish and Southern Energy and British Gas consultation feedback was provided by Energy UK which they both fully endorse. The AUGÉ responses are therefore covered in the Energy UK AUGÉ responses, above.

Queries From	ICoSS
Date Received	29 th June 2012
Date of Response	12 th July 2012

Extract from letter (see original on Joint Office of Transporters Website):

“The AUGÉ in its first year, operating to a tight timescale, created a workable framework to estimate the size and origin of Unidentified Gas. Whilst we continue to believe that the underlying methodology is sound, there is now sufficient opportunity for a more critical eye to be cast over the data that is available. Our concern is that the proposed AUGÉ statement for 2013-2014 places an over-reliance on what limited data exists. To take an example, it is proposed to radically alter the proposed split of undetected theft between the SSP and LSP sectors. As the Unidentified Gas process is an estimate of future gas losses, there is no reason to suppose that the proportions stolen this year were significantly different to those expected in 2012-2013. It is therefore surprising that such a material change is proposed based on a single reported theft instance being included in the dataset.

Whilst any analysis must necessarily take into account the data which is available, for the AUGÉ process to be credible, it must be critical regarding the data that is available and look beyond it where it is clearly creating anomalous results (as the proposed theft changes demonstrate). We do not expect any significant changes in the values proposed for 2012-2013 and hope that any such changes that are proposed are a result of thorough and rigorous analysis undertaken by the AUGÉ and discussed with the industry.”

Response:

As described in the 2011 AUGS for 2012/13 the methodology for theft split derived last year split theft into each year that it occurred rather than the year of detection. The updated theft information received earlier this year (we are expecting a further update shortly) contained a single large theft that had been estimated to have occurred over many years.

At the time we verified that this data was correct with Xoserve and the rationale for this particular record to remain in the data set was covered in the 2012 AUGS for 2013/14. Had it been in the data set prior to the final AUG table publication it would have been in the figures produced for last year.

As the level of theft had been over a number of years it was therefore appropriate for this level to be expected to continue going forward although we do not know if there are other such sites out there or not, but there is at least one.

However, since the 1st draft 2012 AUGS for 2013/14 was published we have been provided further information concerning this site and this is covered as part of the response to Energy UKs item 2:Default Allocation.

Further investigations are ongoing and may result in this site and potentially other theft records associated with unregistered sites being removed from the process although a final decision has not been made at this time as investigations continue.

Queries From	ScottishPower
Date Received	4 th July 2012
Date of Response	12 th July 2012

An amendment to the appendix of the response from ScottishPower was received and is posted on the Joint Office of Transporters website.

Response:

The AUGS welcomes the additional information and will consider the points raised once the current analysis of consumption and theft data is completed. We note that potential issues with meter read provision may have (and we have seen meter read issues in the data set) implications with the consumption analysis although the method we are preparing will account for missing read data.