

AUGE responses to issues raised by British Gas during the consultation period for the 2014 first draft AUGS for 2015/16, 27 June 2014

Below are the issues raised by British Gas in full. Following each issue is the AUGE's response in italics.

British Gas Consultation Response to the 2014 Allocation of Unidentified Gas Statement for 2015/16

11th June 2014

Inaccurate calculation of CSEP consumption

The CSEP aggregate current AQ is not an accurate estimate of consumption and will over-state CSEP consumption. Mod 392 was implemented in June 2012 and amended the AQ values in the CSEP NEXA table. These AQ values are used as default values when setting up new supplies on IGT Networks. The values in the NEXA table were reduced by 15% to 25% depending on property type. The implication being that new connections on IGT Networks prior to June 2012 would have had AQ values about 20% too high. Additionally, on average 25% fewer AQs are recalculated for IGT sites than for Xoserve sites in the AQ Review each year.

Given that the implications of this deflate the currently estimated volume of Unidentified Gas (UG) and that it provides a root cause, British Gas feels this area should receive attention from the AUGE with a subsequent assessment in the AUGS.

Response:

Detailed information about CSEP AQs is not held by Xoserve. The AUGE has requested that British Gas provide details of any industry data that supports their analysis and which would help the AUGE estimate any bias with a sufficient level of confidence. It is proposed that the methodology be updated to allow for a correction to be applied to the CSEP AQ values. If data becomes available in time and a reliable estimate of the correction can be made, then this will be included in the calculated values published in the UG table, otherwise the correction will be zero.

In the absence of detailed CSEP AQ data, the AUGE has made an estimate of the materiality of this issue based on the information provided by British Gas (above) together with existing CSEP AQ data. This suggests that the total UG could increase by about 117GWh.

It is also worth noting that the change in the definition of seasonal normal temperature in 2010 resulted in a reduction in O1B AQ of approximately 4%, and therefore part of the reduction in the NEXA values is attributable to this cause.

UNC Modification 0410A

Section 4.1 of the AUGS describes the suggested treatment of UG following implementation of Modification 410A. In summary, MPRN's created before 01/09/2013 will be subject to the methodology previously used and MPRN's created since will be treated accordingly under the Modification rules. The AUGS makes the assumption that all UG for MPRN's created after 01/09/2013 is temporary, as it will be back billed to the meter installation details. However this will not always be the case. Only if the supply is registered to the Shipper that installed the meter will UG be back billed and therefore elements of permanent UG will remain if an alternative Shipper registers the site into their ownership.

Further analysis needs to be conducted in order to allow for circumstances where the first registered Shipper does not receive back billed charges and thus the UG remains permanent.

Response:

Up to and including the first draft of the 2014 AUGS for 2015/16, it has been assumed that the only circumstances in which Unregistered sites covered by Mod 410A can contribute permanent UG is where the meter at the site in question was disconnected without ever having been registered to a Shipper. At the presentation of the first draft AUGS to the industry (held on 20th May 2014), however, it was highlighted by the author of the Mod that it was intended that sites where the asset Shipper was not the same as the confirming Shipper were also not subject to back billing. Examination of the Mod has shown that it is ambiguous on this subject. Section 3 of the Mod contains a step-by-step guide to actions required, and this states the following:

Step 7:

For the avoidance of doubt, Transportation and Energy charges will only be retrospectively charged to the relevant User if their supplier instigated the Supply Meter installation (the Meter Fix Date).

However, before this it states:

Step 3:

In the event the relevant User warrants that their Supplier did not request installation of the Supply Meter, the Transporter will proceed in accordance with (11).

This means that Step 7 is bypassed in this case and the logic jumps to Step 11. This step is written to cover the situation where a party other than a supplier requested the meter installation, but by the terms of Step 3 also covers the situation where the confirming Shipper is not the Shipper whose Supplier requested meter installation. Step 11 leads into a number of further steps, including Step 17 which states:

Step 17:

Relevant Transportation and Energy charges will be retrospectively charged to the relevant User to the point of Supply Meter installation (the Meter Fix Date).

This contradicts Step 7 in two sets of circumstances:

1. Where the meter was installed at the request of a party other than a Supplier, and
2. Where the confirming Shipper is not the Shipper whose Supplier requested meter installation.

The backbilling situation regarding these two areas was clarified with Xoserve on 19/06/2014, and they have confirmed that no processes have been put in place to allow energy costs to be recovered when the confirming Shipper is not the same as the Shipper whose Supplier requested meter installation (or a party other than a Supplier requested meter installation). Therefore the calculation method for post-Mod 410A Unregistered sites will be amended to reflect this and the updated method presented in the second draft of the 2014 AUGS for 2015/16.

UNC Modification 424 and 425V

Section 4.2 of the AUGS describes the suggested treatment of UG following implementation of Modification 425V. Again the AUGS has made the assumption that all UG for sites withdrawn after the implementation date will be temporary on the basis that back billing will occur. As with Modification 410A this will not always be the case. Whilst the modification allows for back billing of UG to the withdrawing Shipper, where a meter has been found on site, it will not always be the withdrawing Shipper that goes on to register the site. The modification places an obligation on the withdrawing Shipper to investigate, however it is widely recognised that the causes of Shipperless sites under this scenario could mean that the customer has in fact contracted with another Supplier and a failure in the registration process has occurred.

Analysis is required to understand the rate at which different Shippers register sites previously allocated to the Shipperless SSP sector. We also suggest that this analysis is conducted for MPRN's subject to the Modification 424 process, to ensure accuracy of UG allocation with regard to both of these categories of Shipperless sites, as it is quite possible that a different Shipper registers the MPRN due to customer and contractual reasons.

Response:

Mod 425 contains provision for backbilling of energy costs regardless of whether the existing Shipper or a different Shipper goes on to register the site, stating the following:

"It is proposed that the UNC is modified to place an obligation on the last registered Shipper to take responsibility for resolving the issue by undertaking investigations as appropriate and by ensuring that actions are undertaken that will satisfactorily resolve the issue within three months from the date of notification.

Successful outcomes of a Shippers investigation could include: the re-registration of the site by the investigating Shipper or registration of the site by another Shipper.

Where a successful outcome is not delivered by the investigating Shipper within the prescribed timescale, the User's registration will remain in place from the date of the Effective Supply Point Withdrawal.

For clarification, where a successful outcome is delivered, the relevant Transportation and energy costs will be applied to the newly registered Shipper from the date the different Supply Meter was capable of gas flowing. Where this date is unknown the costs will be applied to the investigating Shipper from the date of Transporter notification.”

This means that all sites can be backbilled to the meter install date if this is known, or to the GSR visit date if it is not.

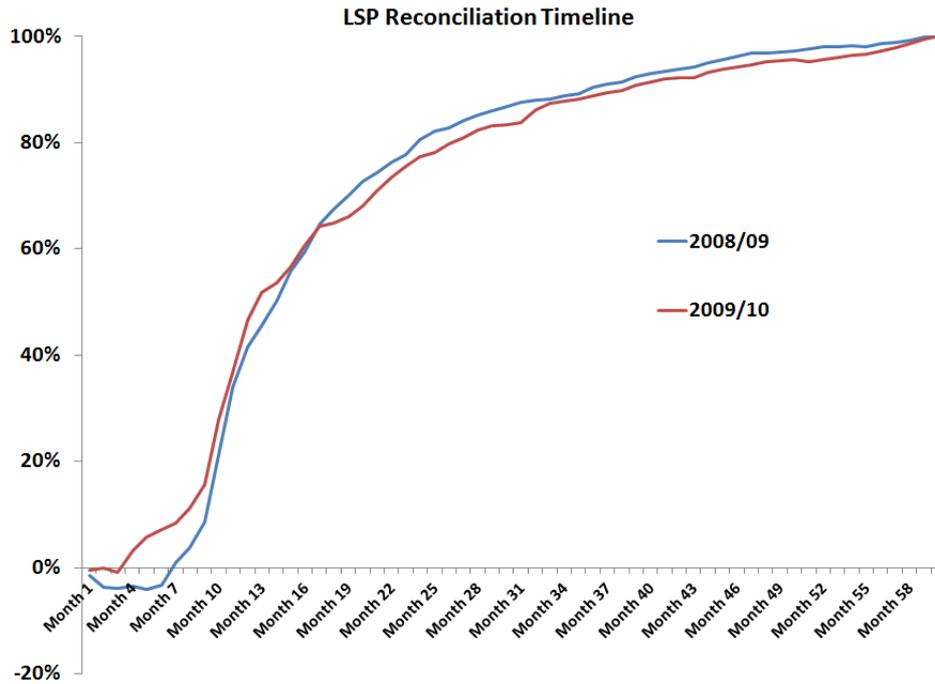
All sites in the Shipperless SSrP category of the Shipperless report have, by definition, already had their GSR visit and so all can be backbilled at the point in time they appear in the Shipperless report. Hence these contribute temporary UG only as long as they were Isolated after 01/04/2014.

For SSrP sites in “Without a Shipper <12 Months”, however, this is not the case. These sites have not yet had their GSR visit, and hence where the meter install date is unknown, the UG they are consuming at this point in time cannot be backbilled and is permanent. Preliminary investigation has shown that the meter install date is unknown for the vast majority of Shipperless SSrP sites, which means that these sites can only be backbilled to the GSR visit date and hence the vast majority of SSrP “Without a Shipper <12 Months” UG is still permanent. A factor representing the permanent proportion can be calculated using the Install Date field in the file “SSrP Isolation and Meter Fitted Date.xls”, and this will be included in calculations in the Shipperless Calculator spreadsheet as part of the ongoing development of this calculation process. This update to the calculation process for “Without a Shipper <12 Months” will be included in the second draft of the 2014 AUGS for 2015/16.

Insufficient maturity of reconciliation data

For an initial allocation period to fully reconcile, it takes a considerable period of time. As such the more recent years (2010/11, 2011/12 and 2012/13) used by the AUGS to project forward have not fully reconciled. Since reconciliation has been observed to always reduce the initial allocation, utilising immature data will inevitably lead to an over-statement of LSP consumption. A factor should be calculated and applied to the more recent years to correct for this.

Reconciliation has fully completed for both the 2008/09 and 2009/10 years. Using the actual reconciliation volumes for those years, it can be estimated that as at March 2014, about 95% of the total reconciliation for the 2010/11 gas year had occurred, about 90% of the total reconciliation for the 2011/12 gas year had occurred, and about 79% of the total reconciliation for the 2012/13 gas year had occurred.



As the AUGÉ intends to use the period 2009/10 – 2012/13 as a training period it is our belief that a factor should be applied to each of the 3 incomplete years to allow for the fact that the reconciliation is in various stages of completion. To not correct for this is to knowingly over-state consumption.

Response:

No issues regarding reconciliation are relevant to the current UG calculations, and this has been the case since the Consumption Method was implemented. Whilst reconciliation figures were used in the original method defined in the 2011 AUGS, from 2013 onwards this was replaced with the Consumption Method, which does not use this data.

In the Consumption Method, market sector totals come from the AUGÉ’s calculations, which in turn are based on meter reads for individual sites. These figures represent the metered total plus the estimated consumption from the “no meter read” (scaling up) population. Values from the deeming algorithm are not used for either market sector. LDZ UG totals are calculated based on the total allocation across all market sectors. This figure is unaffected by this issue because any changes to the LSP market sector total as a result of reconciliation are accompanied by equal and opposite changes to the SSP sector, leaving the combined total unchanged.

Therefore no change to the current method is required.

Incorrect Allocation of the Balancing Factor

In the Glossary the Balancing Factor is described thus:

Balancing Factor An aggregate of the combined unidentified gas of various items calculated by subtraction. This includes theft, errors in the Shrinkage estimate, open bypass valves, meters "Passing Unregistered Gas", unknown sites, and additional Common Cause variation.}

The methodology currently applies the balancing number across Larger NDM SPCs and Smaller SPCs in line with throughput. There is no allocation to Larger DM SPCs as can be seen from the most recent AUG table.

Table 2 Unidentified Gas Volumes for 2014/15

Unidentified Gas source	Aggregate Quantity of Unidentified Gas/GWh	Unidentified Gas Quantity/GWh		
		Larger DM SPCs	Larger NDM SPCs	Smaller SPCs
iGT CSEPs	288	0	0	288
Shipperless/Unregistered	417	0	321	96
- Shipper Activity	0	0	0	0
- Orphaned	33	0	28	5
- Unregistered <12 Months	57	0	49	7
- Shipperless PTS	25	0	14	11
- Shipperless SSrP	291	0	223	68
- Shipperless <12 Months	11	0	5	5
Meter Errors	21	0	21	0
Balancing Factor (Theft + Other)	3779	0	962	2817
Total (inc Independents)	4506	0	1304	3202

The rationale for this 0 allocation would seem to be from 6.1. DM LSP Market Sector:

"In the 2011 AUGS for 2012/13 [10], the UG attributed to DM LSP sites was concluded to be negligible. This is based on the following assumptions:

- *There is no theft from DM sites.*
- *Any Unregistered DM sites are back billed.*
- *DM Sites do not become Shipperless*
- *There are no unknown DM sites."*

2014 Allocation of Unidentified Gas Statement for 2015/16

There is no evidence provided to confirm the assumption that there is no theft from DM sites. DM sites have different categories, DM Mandatory (DMM) above 58,600,000 kWh threshold, plus DM

Elective (DME) and DM Voluntary (DMV) where consumption is above 73,200 kWh. We are aware that a site with high LSP consumption and daily read and corrector metering equipment have been identified with theft occurring. Whether the sites are nominated as DMM, DMV or DME, is to some degree, irrelevant. Where theft is occurring, AQ's are naturally understated and therefore a Shipper may not choose to opt into the DM regimes due to the fact that actual consumption levels are not known.

Some industry parties suggest that theft does not occur where daily read equipment is in place, as the types of sites under this scenario do not take action to steal gas. This is simply not true and we feel the AUGE should reconsider the assumption that there is no theft on DM sites. There is also an assumption that large companies do not steal gas i.e. from a behavioural perspective, it's not something they would do. We would refute this as evidence of theft does exist in large companies with multiple sites.

Response:

The AUGE will carry out an investigation to confirm whether examples of DM theft do exist. Note, however, that the premise of the question is slightly inaccurate: our assumption is not that DM sites do not steal, but that no permanent UG arises from DM site theft, i.e. any DM sites which do steal are identified at some point, are back-billed and appear in Detected Theft records. Therefore our only core assumption regarding theft from DM sites is that due to the additional scrutiny on such sites, none manage to steal indefinitely without detection.

Xoserve have agreed to provide a new theft dataset containing a Gas Nomination Type field: without it we can only identify DMM sites, whilst the new field will allow us to identify any theft from DMV and DME sites as well.

Any UG associated to Unregistered and Shipperless sites is captured as part of the directly measurable component of UG. The DM supply point category is applicable for the period of time that a Shipper has a site nominated to it, i.e. DMM, DMV or DME category. It does not represent behaviour or circumstance. To be able to assert that "Any Unregistered DM sites are back billed" or that "DM Sites do not become Shipperless" the AUGE would need to have established through analysis that; any MPRN that was unregistered for a period of time initially and that subsequently went on to become DM, did in fact have back billing occur and that evidence of this can be seen in Xoserve's records. And that; any site that has been DM for any period of time has never been in a Shipperless status. This analysis should cover the appropriate period of assessment in line with AUGE methodology.

Response:

There have been no sites above the DM threshold in either Shipperless category in any snapshot we have received, and this covers the DMM case. Xoserve have agreed to provide new Backup MPRN data files that include a Gas Nomination Type field, and when received these will allow us to assess the situation with DME and DMV sites.

There are a limited number of sites above the DM threshold in Unregistered. The backbilling status of these particular sites will be verified with Xoserve. DME/DMV sites are not relevant in this case

because where a site is Unregistered and its AQ falls above the DM threshold it is only notionally DM – there is no Shipper and hence no daily meter readings being taken. It therefore follows that a site cannot become voluntarily DM whilst it is Unregistered. Therefore, the only sites that can be regarded as DM whilst Unregistered are those with AQs above the DM threshold.

There is no evidence provided to confirm the assumption that there are no unknown DM sites. As they are unknown this cannot be established therefore the working assumption should be that there is no evidence to suggest there isn't.

Response:

Found Sites records will be used to verify whether any are classified as DM. This analysis will use the data that will be provided from the Mod 431 analysis and will hence take place when this data becomes available.

Even assuming that the AUGE's assumptions hold true once evidence is provided this still leaves residual elements of the Balancing Factor (as described by the AUGE) which are applicable to DM sites:

- Errors in the shrinkage estimate
- Open bypass valves
- Meters "Passing Unregistered Gas"/Meter Errors
- Additional Common cause variation

Taking these factors in turn:

Errors in the shrinkage estimate

There is no evidence provided that the Shrinkage error will "even out over time". As the AUGE has recognised:

"If changing conditions over time have led to the Shrinkage model becoming biased, these effects will be picked up by the Balancing Factor (see 6 below), and this is therefore where this element will be captured."

2014 Allocation of Unidentified Gas Statement for 2015/16, 3.3.2.3 Page 13

Leakage (the majority of the Shrinkage) estimates are derived from information obtained from the 2002/3 National Leakage Test programme. It is a reasonable consideration that in the decade that has since elapsed changing conditions may well have led to bias.

Any error in shrinkage affects the total estimation accuracy of UG (as confirmed by the AUGE). As such, any error should be apportioned across the entire market (including DM LSP) in line with throughput.

Response:

In order for any such bias to be quantified, new up-to-date data would be required, i.e. a new National Leakage Test. This is beyond the remit of the AUGE. It should be noted, however, that the

*Shrinkage model based on 2002/03 data does not apply a fixed leakage level to the population, it applies leakage rates to different materials, and hence the changing population over time is accounted for: bias will only occur if leakage rates **for particular materials** have changed over time. If there is a requirement to analyse this area and assess the need to update the Shrinkage models, this should be done via the Shrinkage Forum, not by the AUGÉ.*

Open bypass valves

Despite identifying open bypass valves as a cause of UG there is no reference to any analysis conducted within the methodology. Open bypass valves can only increase UG, they cannot “*even out over time*”. As such the Balancing Factor by definition contains UG associated to open bypass valves. Ideally, this element of UG should be estimated and allocated across sector in accordance with the propensity for a bypass valve to exist and be open and the relative quantity of UG will be proportional to throughput. Bypass valves are known to exist in SSP, LSP and DM sites and with no clear industry strategy on the management of such situations, there is likelihood that bypass valves remain open for periods of time causing UG.

A sample of industry data for DM sites, in both mandatory and non mandatory sections shows that 19.35% have a meter bypass fitted. Industry-wide data is available from Xoserve.

The NDM LSP population, as can be found in the AUGÉ Statement 3, Meter Capacity Report shows just 2.09% of meters with bypasses fitted. Furthermore a sample of SSP sites shows this figure drops to less than 0.002% of sites with a meter bypass fitted. Again, Xoserve data can confirm the industry-wide figures.

It can be concluded that the propensity for UG in both DM and LSP sites under this scenario, varies by Supply Point type and should be factored proportionally into the allocation of the balancing number.

UG through open bypass valves is a known cause, although not currently quantified, however an assumed rate of use could be derived, possibly based on reported use of meter bypasses or a sample based approach. As such DM and indeed LSP sites should receive an allocation of the Balancing Factor to correctly address this.

In addition, we feel this area should receive attention from the wider industry to validate the necessity for and use of bypass valves, as inappropriate use has an impact on the safety and security of the supply network.

Response:

This element of UG is already dealt with in our calculations as part of our Meter Adjustments process. Xoserve confirmed by e-mail on 27/06/2014 that gas flow through open DM bypass valves is always backbilled, and that the associated adjustments due to open bypass valves on DM sites are included in the Meter Adjustment dataset. They are therefore already accounted for in the total UG calculation for any given LDZ because they are removed from the NDM Allocation figure before the total UG is calculated as the difference between the NDM Allocation and the Metered NDM Consumption. Therefore gas that flows through open bypass valves on DM sites never appears in the UG figures and no further action is required.

Meters “Passing Unregistered Gas”/Meter Errors

It is recognised as a positive move that the AUGE has undertaken analysis to identify meter errors and the Meter Capacity Report (AUGE Statement 3) provides details of this. The AUGE Statement indicates “*Data for meter error calculation consists of meter capacity, AQ and NDM/DM classification records for all LSP sites*”. The report identifies 73,992 in the under-read category and 71 in the over-read category.

However, having reviewed the report it has been noted that no DM sites appear in the analysis and we believe this could be an oversight. We would request that the AUGE ensures a complete dataset for this year’s analysis so that under or over-read can be correctly estimated for DM sites in addition to NDM LSP sites. AQs for DM sites, which routinely have large meters, can be as low as 73,200 due to changing on-site circumstances and therefore it is important that UG due to meter error is estimated as accurately as possible and included.

Additionally, given that daily reads are available for DM sites and that volumes of gas are considerable in this market, more accurate analysis should be undertaken to determine over-read and under-read to a greater frequency. Data in this area shows that sites do not always burn gas consistently on a daily basis with fluctuations in usage occurring day on day depending upon the site concerned. In fact, some DM sites show zero metered consumption for certain days or periods, however there is a strong likelihood that there is still some consumption, albeit small and that the meter is under-reading.

We would welcome more complete analysis in this area and an explanation of how meter under or over read has been calculated given that not all meter errors can be identified and reported.

Response:

We do have data for DM meter errors and this area is referenced in Section 6.1 of the first draft of the 2014 AUGS for 2015/16, which states:

“This leaves only unknown meter error for DM sites. The method for calculating this is described in Section 6.6 below. Analysis for the 2014/15 formula year described in the 2013 AUGS for 2014/15 [29] indicated that there is little or no over-read on DM sites due to meters working at the very low end of their range.”

Data can be provided covering this area if required. It shows that there is in fact a tendency to over-read rather than under-read in the DM market sector and as for the NDM market sector the values involved are very small. Therefore, rather than introduce the complexity of a small negative UG value in the DM sector, we have treated it as zero.

Additional Common Cause Variation

Common Cause Variation is a source of variation caused by unknown factors that result in a steady but random distribution of output around the average of the data. There is no evidence contained in the methodology as to why DM sites should be excluded from an allocation of UG relating to Common Cause Variation. By definition, they should be included since the source of Common Cause

Variation is unknown. As such DM sites should receive an allocation from the Balancing Factor to correctly account for this phenomenon.

Response:

Common cause variation is, by definition, distributed $N(0,\sigma)$ – i.e. the mean is zero. Therefore, whilst it does apply to the DM sector as well as any other, the net effect over time is nothing.

To conclude, British Gas firmly believes that additional analysis is required to identify UG in the DM market and that DM sites should receive an UG allocation where evidence is found and an allocation of the balancing factor.

Industry Activity and Initiatives relating to Gas & Electricity Theft Detection Rates

Further to your recent presentation on 30th May at the UNCC meeting, we would like to provide some clarity on the Theft Detection information that was presented within slides 22 & 23 of your slide pack.

Supplier Licence Obligations

We can confirm that the obligation on all suppliers to detect, prevent and investigate theft was introduced on 8th January 2013, but that this obligation is enduring and does not have an end date.

Gas Theft Incentive Scheme

SPAA are currently developing a change proposal, raised by British Gas, which proposes the introduction of a Gas Theft Incentive Scheme. The scheme as currently proposed, will cover all gas suppliers and all supply points across all sectors, including DM supply points. This change has been raised in response to Ofgem's Gas Theft decision document dated March 2012, which invited the introduction of such a scheme in line with some detailed principles.

The scheme will introduce an initial annual target of 6,000 individual gas thefts (as recommended by Ofgem) across the whole market. The initial 6,000 target is widely viewed (including by Ofgem) as being a conservative figure and is expected to increase year on year as more effort is placed in theft detection and as a result more theft is identified.

The Theft Risk Assessment Service (TRAS) will ultimately be responsible for developing a Theft Methodology which will review and set future annual theft targets. The change proposal proposes an implementation in 2015, aligned with the commencement of the TRAS.

Theft Risk Assessment Service (TRAS)

A joint SPAA/DCUSA working group is currently progressing the development, procurement and implementation of a dual fuel TRAS. The group's current work plan expects the TRAS to be initially operational by approximately June 2015, with a phased implementation approach delivering full implementation of the TRAS by February 2016.

Response:

Thank you for this clarification.