DNV·GL

ICoSS Response to consultation on Allocation of Unidentified Gas Statement 2018/19

Comment:

Gas Theft

Split between Product Classes and EUC Bands

Gas Theft will not be uniform across all customers as the propensity to steal will depend on a variety of socio-economic factors as well as the opportunity and ability to steal. It is therefore disappointing that again there is no assessment of the variability of gas theft owing to the widely varying nature of gas customers.

As we set out last year, there is sufficient information provided by shippers for the AUGE to attempt to determine the variability of theft by EUC Band. Since 2012 over 14,000 confirmed theft cases have been reported, resulting in around 3% of the total theft in the market being detected each year. This information should be used to refine the table set out in page 58.

In addition, though the amount of information held by Xoserve was insufficient to allow a true assessment of the propensity of Smart and AMR sites to steal gas, this situation seems to have improved. On 14 March 2017 the AUGE indicated that there were only 700,000 such sites recorded in asset data held by Xoserve. On 27 November 2017 at the UNC Modification 0632S workgroup, Xoserve reported 2.2m smart meters were registered. Sufficient information seems to have been provided by shippers regarding their role out during 2017 to allow the AUGE to undertake the analysis we originally suggested.

The current information dataset which Xoserve has is therefore of a suitable size (statistically significant) to allow the AUGE to determine with a high degree of accuracy the distribution of theft against consumption levels and meter type, so allowing the UG factor to be calculated with a far greater level of precision.

Response 2018_17:
It is acknowledged that following the successful Mods that have reduced Unidentified Gas from other sources to very low levels, detected theft is by far the most important remaining element. The AUGE agrees that this area should now be the focus of attention in order to quantify and split it as accurately as possible.

The approach adopted for the 2017/18 AUG Statement was based on the data available at the time. In particular, all of the asset data came from the pre-Nexus period and there was no information available on actual Product Class. This necessitated the creation of assumptions and the adoption of rules to split the population by Product Class. The theft calculations were designed to operate at an aggregate level as much as possible and hence avoid the inaccuracies introduced by these assumptions.

With regard to the relative levels of theft from Smart Meters and traditional meters, as ICoSS rightly say the reason for using the current approach is the unreliable nature of the asset data. The type of meter associated with each theft (by MPRN) could in theory be found in this data if it was reliable. This issue has been documented fully in other consultation periods, but in summary the effect is that the presence of Smart Meter and AMR by MPRN is heavily under-recorded. Therefore, any estimates of the levels of theft from such devices will be extremely inaccurate.

As noted, there appears to have been a considerable improvement in the levels of Smart Meters recorded in the asset data, from 700,000 in 2016 to 1.3m in May 2017 and a reported 2.2m in November 2017 (Nov 17 figure not verified using data supplied to the AUG Expert). A further improvement may be expected as a result of the implementation of Mod 632. In addition there are a further 1.8m non-SMETS Smart-type meters recorded in the asset data. Whilst this is some way short of the full population as reported to BEIS, the numbers may now be sufficiently high to enable a robust analysis of theft from Smart Meters and AMR using detected theft information.

There are still a number of other unknowns, however, which complicate the analysis and together mean that we cannot guarantee that any such work will yield results that can be used in the Unidentified Gas calculation. The most important of these are as follows:

- *We demonstrate in the AUG Statement that there is a window of approximately 8 years during which any thefts which will eventually be detected are detected. This means that thefts can run for a considerable length of time before detection. The Smart Meter population is young and we are in the early stages of this window for the vast majority of them, meaning that most theft from this source that will go on to be detected has not been detected yet. This in turn means that any analysis of Smart Meter theft that is undertaken whilst the installation phase is still ongoing will under-estimate the level of theft from this source. Whilst every effort will be made to account for this known effect and produce an estimate of overall Smart Meter detected theft, this necessarily introduces additional uncertainty into the calculation.*
- *Detected theft is not necessarily representative of overall theft because it is highly influenced by what detection activity is carried out. In short, you will only find theft where you look for it. The introduction of TRAS mitigates this to a certain extent because they apply an even approach to theft detection and supply leads to Shippers. It is still up to the Shippers to decide whether to follow up these leads, however, and so the theft targeting effect still remains. This, again, introduces additional uncertainty into the analysis.*
- *Both TRAS and the Smart Meter programme are relatively recent developments, and as described above there is usually a significant time period between the start of a theft and its detection. Based on the combined effect of these phenomena, we took the decision that the data was too immature to attempt a full analysis of detected theft for the current AUGE period.*

Despite these nuisance factors, the AUG Expert is committed to carrying out a full analysis in this area for inclusion in the 2019/20 AUG Statement. In support of our analysis, we have requested further information from TRAS, as we believe that they hold information about the meter type and method of theft.

Finally, with regard to the use of socio-economic factors in the theft analysis, we acknowledge that the propensity to steal is likely to vary based on such factors. It is not possible to use these factors in the Unidentified Gas analysis, however. This is due to the fact that the theft records supplied to the AUG Expert, like all of the data we receive, is anonymised. We do not have any information regarding each theft apart from the LDZ the site is situated in, and hence the socio-economic status of the address associated with each theft cannot be ascertained.

Comment:

Smart and AMR devices.

The AUGE has again identified two key differentiators in determining whether a site will be more or less likely to steal gas; whether it is a DM site or whether it is has AMR or Smart meters installed.

The chances of theft from any form of site settled on a daily basis (either Class 1 or Class 2) going undetected until the code cut-off date (up to D+4 years) is minimal as the site's consumption is monitored daily with the information provided direct to the supplier. **This is recognised by the AUGE when it is has stated that no daily read sites have ever had a theft incident**. It is the frequency of meter readings, not the metering equipment, that drives whether Gas Theft goes undetected; it follows that the actual level of undetected theft from sites with any form of AMR or Smart device operated in the same manner as a DM site is in fact de-minimis i.e. zero and so all sites that are daily settled should be treated as attracting zero theft, rather than the 50% factor currently allowed for in Class 2.

We note that in April 2018, the majority of Class 1 sites will be forced to move to Class 2 if they wish to stay daily metered, otherwise becoming Class 4. If this is the case then they will move from having no UG owing to gas theft being allocated to them, to be no different as other sites in Class 2 and have significant amounts of UG allocated to them. This is illogical.

Response 2018_18:
We accept that the split of the population by EUC and Product Class causes difficulties as described by ICoSS and we have carried out a preliminary analysis into whether there are ways to address

these. The issue arises from the fact that a single set of factors (one per EUC) is produced for each Product Class. This causes a problem for Product Class 2 because it consists of a mix of ex-DMV sites (which did not have any theft-related Unidentified Gas assigned in the pre-Nexus world) and ex-NDM sites (which did). The fact that the two are contained in a single group means that they cannot be fully separated, and this has impacts for Shippers with such sites in their portfolio. In particular, any Shipper with only ex-DMV Product 2 sites will now be billed for Unidentified Gas where previously they would not have been.

Unfortunately this is unavoidable due to the hard-coded EUC/Product Class split. We are, however, committed to carrying out an investigation into this area for the AUG Statement for 2019/20 to ascertain whether any actions can be taken to reduce the magnitude of this effect. It has not been possible to carry out such work for the current AUGE period due to the very low take-up of Product Class 2 to date. Once sufficient PC2 data is available this analysis will be carried out.

It should be noted that there is no perfect solution, however. Whilst we may be able to improve the current situation, it remains the case that a single set of factors must be produced for Product Class 2. This will inevitably create some sort of subsidy between ex-DM and ex-NDM elements, although we will attempt to minimise this where possible.

Comment:

Smart and AMR Population Estimates

We note that the AUGE has used the latest statistics to determine the level of AMR and Smart Meters currently installed. This information is comprehensive for the domestic market, but does not provide an accurate view for the non-domestic market as it does not take into account the submissions for most non-domestic suppliers. We have provided detailed information separately, but we estimate that over 100,000 additional advanced meters are not covered in the calculation. **This would roughly triple the number of non-domestic sites with Smart or AMR devices and significantly alter the scaling factors for Classes 2 and 3.**

Response 2018_19:
The AUGE is grateful to ICoSS for the additional information supplied, which will be used in the calculations of Smart Meter/AMR populations in the revised AUG Statement. The data provided consisted of totals for both the AMR and the total meter population, which allowed an installation percentage to be calculated. Whilst the figures supplied only cover ICoSS members and not other small suppliers, it can be assumed that the rate for these suppliers is similar to the one for ICoSS members. Therefore the data we now have, including that supplied by ICoSS, is sufficient for us to calculate more accurate Smart Meter/AMR penetration rates for the non-domestic sector.

Comment:

Shrinkage Error

ICoSS agrees that any inaccuracies with the shrinkage calculation should be addressed via the shrinkage forum rather than in the AUGE process.

Response 2018_20:
Noted.