

22 February 2021

FAO: UNCC Committee

CC: Change Contract Committee

Assessment of draft 2021-22 AUGÉ Statement against the Framework for the Appointment of an Allocation of Unidentified Gas Expert

The Industrial & Commercial Shippers & Suppliers (ICoSS) is the trade body representing the majority of the GB non-domestic energy market. Our members¹, who are all independent Suppliers, in total supply in excess of three quarters of the gas and half the electricity provided in the highly competitive non-domestic market.

On behalf of members who are Code Parties we have undertaken an assessment of compliance with the AUGÉ Statement that was provided for review to the industry on 30 December 2020, against sections 5 & 6.2 of the Framework for the Appointment of an Allocation of Unidentified Gas Expert (“AUGÉ Framework”).²

For the avoidance of doubt, we have not reviewed the other sections of the document.

We therefore wish to highlight concerns in relation to compliance with the Framework as follows: -

5.1.1 The AUGÉ Expert will create the AUGÉ Statement and AUGÉ Table by developing appropriate, detailed methodologies and collecting necessary data.

Theft Rate

The AUGÉ Framework requires that the method should be “*based on a replicable methodology, using publicly available data sampled over a consistent timeframe and with a view to updating the distribution of Unidentified Gas at fixed constant intervals*”³.



² [Framework for the Appointment of an Allocation of Unidentified Gas Expert](#)

³ [Identification and Apportionment of Costs of Unidentified Gas](#)

This requirement does not mean that any method is acceptable as long as it functions in the stated manner, it also has to be unbiased, accurate and appropriate as well as being replicable, using public data etc.

The theft process set out in the AUG Statement uses a theft estimation method that was rejected by both the industry and Ofgem in 2010⁴, at the commencement of the AUGE process

We note that as recently as the November AUG Sub-Committee meeting a theft methodology had not been decided upon. This subsequently changed to estimating using figures from other industries, which was first presented in the draft AUG Statement. There has therefore been very limited time to assess this process in detail.

From the information provided to date, the total theft rate is not a detailed methodology as we understand it, instead it is an estimate of likely theft rates based on a series of high-level sources from other industries and sectors.

This estimate could easily be adjusted to a new percentage using the “balanced judgement” approach as there is no evidence as to why 1.5% is better than say 1.6%, or 1.4%.

This is best evidenced by the fact that though an error was identified in the referenced range of retail theft estimates which is now 1.06%-1.21% (previously 1.1%-1.62%) but the overall theft level remains at 1.5% (which is now outside the range of retail theft estimates).

Any methodology that utilises data inputs would produce a different result when they are adjusted.

The AUGE have now been asked several times to provide both the background data and the methodology, and to date they have provided only the data sources in the consultation response.

SME theft levels

It was noted at the AUG Sub-Committee meeting of 12 February, that the chosen approach for assigning UIG to market sectors resulted in an SME theft rate of 14% of throughput, compared to an estimated overall theft rate of 1.5% of throughput for the full population. To date, no detailed assessment has been provided as to why such a large proportion of sites have been assessed at stealing gas but have not been detected, or why this number is a robust assessment of the scale of the problem.

⁴ UNC Modification 0229 decision letter

In addition, the assessment of SME sites was confirmed to have been extended to all small non-domestic premises (many of which are not SME sites, but part of large national retail chains for example). To date, no detailed justification as why this is appropriate has been provided.

Bottom Up versus differencing.

This approach has replaced the previous methodology which used a differencing method. Owing to low levels of unmetered consumption and a small amount of Own Use Gas and relatively low leakage the gas industry is probably the most suitable industry for estimating theft by difference as there is very little unmetered consumption.

The new, “bottom-up” approach used a number of statistic references that use a differencing approach, however: -

- In the water industry, there are large quantities of legally taken unmetered water and leakage is a significant problem (see below). It is impossible to reliably estimate this legal unmetered water use and leakage, rendering any theft estimates highly uncertain.
- The electricity industry is slightly better, but again theft estimates rely on accurate estimates of unmetered supplies (e.g. streetlights) and distribution losses.
- The numbers quoted in the retail theft references are the difference between the expected revenue from stock and the actual revenue from stock.

Considering the fundamental differences between the markets we would expect that the AUG Statement would set out in detail how these differences would be accounted for.

Consumption

The effect of Covid-19 on future I&C consumption has not been accounted for in the approach. Yet there is clear evidence of permanent business closures in sectors such as particularly in retail, hospitality, tourism, transport, arts and entertainment etc. and it is difficult to argue that this will not cause a subsequent reduction in demand in the short to medium term. ONS provide relevant statistics which can be found at Business insights and impact on the UK economy - Office for National Statistics (ons.gov.uk).

Whilst the AUG Statement may set out that ultimately these impacts will not lead to any material change in UIG, we have found no evidence of any assessment of this material event on UIG.

5.1.2 The decision as to the most appropriate methodologies and data will rest solely with the AUG Expert taking account of any issues raised during the development and compilation of the AUG Statement and AUG Table.

Whilst the AUG Expert has no obligation to amend their calculation method in line with comments, it needs to respond to them (see 5.1.10). Using the ICoSS consultation response, of the 53 issues raised:

- 17 were addressed.
- 4 were addressed in part.
- 9 were acknowledged but we do not believe were addressed.
- 23 were not acknowledged.

Some of these issues have a potentially significant impact on the AUG Statement. For example, the issue of pressure correction was raised by ICoSS during the consultation process. The AUG Statement states,

“From the Ideal Gas Law and the linear relationship between pressure and volume, we determined that this Pressure Gas Volume Error Rate is 0.00098692m³ per millibar.”

Our concern is that does not comply with Boyle’s law. To ensure that the AUG Statement is robust, such questions should be responded to, even if only to provide clarity that the AUG Expert has considered them.

5.1.6 The AUG Expert will use the latest data available where appropriate.

Further to our points in Section 5.1.1, the AUG Statement we note that pre-privatisation data (so before 1990) has been utilised to determine theft, whereas data from 2004 has not been considered.

This data has also been used in preference to a direct method of estimating gas theft based on current meter reads or TRAS/CMS data.

5.1.7 Where multiple data sources exist the AUG Expert will evaluate the data to obtain the most statistically sound solution, will document the alternative options and provide an explanation for its decision.

Further to our point above in Section 5.1.1, the AUG Statement does not seem to detail a significant assessment of the various data sources referred to in other industries which are used as a proxy for assessing gas theft:

In relation to the Water Industry only one source is provided for comparison; a Question for Department for Environment, Food and Rural Affairs which states: -

“Based on information provided by water companies, the Environment Agency assesses that around 3% of water put into public supply is used and not paid for. This includes water taken legally and water that is stolen. Water taken legally includes public supplies for which no charge is made, such as firefighting and training. The ratio of the 3% taken legally to illegally is unknown.”

We have noted that in a further, high-level, source, the statement is made that *“Three billion litres of water a day are lost through leakage, equivalent to that used by over 20 million people.”*⁵ No further information is provided on how the 3% is then reduced down to 1% of theft or whether any further external sources are used. In relation to the Electricity Industry five references have now been provided, one used to define the 2.5% upper limit of electricity theft. This is a letter from a former industry employee with no supporting information –

"The aforementioned comments are drawn from the experiences of the author who was responsible for Revenue Protection in Manweb between 1983 and 1986".

The letter states

"During the 1980's some UK electricity companies were losing 2 ½% of their total sales because of Illegal Abstraction (£18M in Manweb alone). The worst hit areas were London, Merseyside and Glasgow with the Northeast suffering the least theft losses."

This letter refers to experiences over 30 years ago and recognises a geographical variation in theft and the 2.5% appears to refer to Manweb which is highlighted as one of the worst hit areas.

A number of other sources have not been utilised, such as an assessment by Ofgem in 2004⁶. This states that DNOs estimate electricity theft as 0.2%-0.6% and that UKRPA estimate it as 1%-1.5%.

The AUG Statement's quoted range for national electricity theft is 1.0% to 2.5%, so discounting, the figures estimated by the DNOs, using the lower limit from the UKRPA estimate and the opinion of a former DNO employee for the higher limit.

It is unclear as to why these values were chosen and there has been no statistical analysis provided to support these values.

Finally, the AUG Statement recognises that electricity theft includes an amount due to cannabis farms which are an issue specific to the electricity industry. Despite the significant amounts of electricity stolen for this (up to 1/3 of all electricity theft by

⁵ [The state of the environment: water resources](#)

⁶ [Theft of electricity and gas - Discussion Document](#)

Ofgem's estimation⁷), we have no evidence the AUGE has attempted to quantify or account for this; though it was raised during consultation, there has been no response to this concern. In relation to retail the values utilised, which are from a web-page summarising the findings of the Centre for Retail Research and a review of organised crime in the United States, refer to theft across all parts of the supply chain such as theft from depots, etc. The AUGE has indicated that they have removed the equivalent of "mid-stream theft" (that is shrinkage) from the final calculation, but the process for weighting these values have not been provided.

In addition to concerns regarding industry data, it should be noted that an entirely different data source for estimating theft exists: the data required to calculate theft directly using a differencing approach is available and was used in previous AUG Statements.

5.1.10 The AUG Expert will present at a meeting the AUG Statement, including the AUG Table, in draft form (the "proposed AUG Statement"), to Code Parties seeking views and will review all the issues identified submitted in response.

6.2 Code Parties Raising issues for consideration during the consultation period.

Please see 5.1.1 above, 23 out of 53 issues raised by ICoSS were not responded to, with only 17 fully addressed.

5.1.15 The AUG Expert will act with all due skill, care and diligence when performing of its duties as the AUG Expert and shall be impartial when undertaking the function of the AUG Expert, ensuring that any values derived will be equitable in their treatment of Code Parties.

The AUG Statement as currently proposed is not, we believe, a robust assessment of UIG, having not provided a detailed methodology for the largest component of UIG calculation, not addressed all concerns fully, or sufficiently justified the use of data to determine the values proposed.

In light of the deficiencies identified above, the AUG Statement does not, we believe, fulfil the requirement required by gas shippers of equitable apportionment between Code Parties of the cost of Unidentified Gas.

5.1.16 The AUG Expert will compile the methodology and AUG Statement and AUG Table in accordance with this Framework.

We have indicated in our response above several areas where the AUG process has not delivered to the standard required in the framework document, specifically 5.1.1,

⁷ [OFGEM PROPOSES NEW RULES FOR SUPPLIERS TO TACKLE ELECTRICITY THEFT, Overview of questionnaire responses on theft of energy](#)



5.1.2, 5.1.6, 5.1.7 & 5.1.10/6.2. As it currently stands therefore the AUG Table and AUG Statement are not, we believe, compliant with this framework.

Way Forward

It should be noted that the deficiencies we have identified were not apparent until the AUG Statement was provided seven weeks ago, and they have not been rectified, despite numerous requests to do so. We believe these matters are material in nature and need to be addressed with suitable remedies provided. As the Framework itself is silent on the consequences of non-compliance we would welcome further clarification in relation to this matter.

We believe that due to the current concerns in relation to compliance with the Framework, as set out in this letter, and to allow time for these deficiencies to be rectified, the AUG Table for 2020/21 should be utilised for the AUG Year 2021/22. Our understanding is that this would, in the absence of a unanimous vote which we do not believe would be forthcoming due to commercial interests, require a UNC Modification to be brought forward.

Please contact me if you need anything further.

Thanks

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