IGEM Standard for Gas Quality (Minimum gas quality requirements for the safe conveyance within Great Britain of gases of Group H of the Second Gas Family ("2H" gases)
REA Consultation Response

The Association for Renewable Energy & Clean Technology (REA) is pleased to submit this response to the above consultation. The REA represents a wide variety of organisations, including generators, project developers, fuel and power suppliers, investors, equipment producers and service providers. Members range in size from major multinationals to sole traders. There are over 500 corporate members of the REA, making it the largest renewable energy trade association in the UK. The REA Biogas member forum has been the voice of the biogas industry in the UK since 2004, and currently has over 200 member companies including several involved in the development, operation of biomethane plants and green gas injection.

The REA is particularly concerned on the changes proposed to widen the Wobbe Index range for gases used within the UK network.

The widening of the upper limit means that the costly addition of nitrogen (N_2 ballast) to Liquid Natural Gas (LNG) imported from Qatar and the US would no longer be required to comply with the UK gas quality standard.

However, the biomethane sector is concerned that if this change is made, it may have a knock-on effect on biomethane: in general it is clear that more propane will be needed to be added to biomethane to bring up its calorific value (CV) which will clearly be higher in Great Britain as a result of reduction in inerts in the gas. **So, it is important to link the change in Wobbe and its potential adverse impact on biomethane (and net zero) to the Future Billing project implementation: both changes should be implemented at the same time[1].**

It would be useful to look at existing biomethane projects and what Flow Weighted Average Calorific Value (FWACV) target they currently meet (by adding propane) and then to model the impact of a change in the Wobbe Index at the LNG terminals caused by not having to ballast with N_2. Then the estimated increase in FWACV for these biomethane projects caused by the change in Wobbe (determined by less ballasting) should be calculated. Please note that this only applies to biomethane projects that are in the south of Great Britain, as the ones in Scotland don't see any LNG but do have to meet a higher FWACV target at most times).

The REA would be happy to discuss this further with IGEM if this would be deemed useful.

[1] The same happened when FWACV was introduced in 1998: this was done at same time as change to odorisation to move from beach terminals to LDZ entry.

Additional notes

- There have been a number of initiatives (such as the NIC Future Billing methodology led by Cadent as well as other projects led by SGN) which are trying to remove the need for fossil propane addition. Ahead of any possible change to the requirement to enrich propane, the REA believes some technical changes can be made to reduce the amount of flaring caused by the CV measurement system when biomethane plants start. If there was flexibility for 15 minutes to go outside the FWACV window on start up (without triggering the FWACV cap) it would make plants simpler to operate with no impact on gas consumers. REA would urge ENA to work with biomethane producers and Ofgem to make the necessary technical changes. This change is not related to Wobbe and has no safety impact.
- The Future Billing Methodology (FBM) NIC Project commenced in April 2017. Its aim is to achieve the decarbonisation of heat using Great Britain's existing gas distribution networks to transport renewable and other low carbon gases without the need for enrichment with fossil-based gases to standardise its energy content (calorific value or CV) for billing purposes.