

REA Landfill Gas meeting

16th July 2019, started 1:45pm. Finished 4:15.
Burges Salmon Offices, 6 New St Sq., London.

Welcome and introductions

Andy Leeding, Infinis
Bob Gregory, Bob Gregory Associates
Mark Dawber, Viridor
Graham Ball - Enovert
Stuart Markham, EDF
Kleem Altaf, Suez
Mike Guy, Arevon
Andy Leech, Renewable Power
Ross Fairley, Burges Salmon
David Rice, CLP
John Cove, Suez
Gaynor Hartnell.

Chair

Steve Shaw, Veolia

Guest speakers

Alan Guiver, Agren Power
Professor Tim Bugg

Competition Law Compliance DOs and DON'Ts

Steve Shaw drew attention to these.

Post meeting note – we would also like to point out that members need to seek their own advice when it comes to commercial decisions e.g. on RO accredited plant modifications or G59 / 99 applications.

Bacterial lignin degradation for enhancement of municipal waste breakdown, Professor Tim Bugg

Tim Bugg introduced himself. [Find his slides here](#). He is a Biological Chemist working on enzymes, and for last 10 years has been working on lignin degradation with the aim of making high end value chemicals from it. 15 – 30% of lignocellulosic material is lignin and it is extremely hard to degrade. Lignin is the main source of aromatics in the natural environment.

Professor Bugg gave a presentation on the work undertaken at Warwick University, on bacteria found within the landfill body, focusing on the 3 they hadn't seen before that function as facultative anaerobes (i.e. can function in both anaerobic and aerobic environments). There is potential for these to enhance gas production by around 3 – 4 fold. The work had only been done at small scale (0.5 litre containers, and it was not clear the extent to which the conditions were anaerobic).

There were questions on whether these microbes might typically already be present whether physical changes in the site influence their abundance, whether funding may be available to investigate this further.

Action: Bob Gregory to talk to Tim Bugg in more detail and come back to next meeting with a proposal as to what could be trialled or what funding sought, at the next meeting. GH to do an introduction by email.

RO issues – Ross Fairley

TBA

G99 issues, Alan Guiver

Alan introduced himself and explained the background to him having got invited to assist the ENA. [Find his slides here.](#) The new procedures became live in April, but the document itself is still being drafted. The first draft is currently in a consultative phase, and is now with Ofgem. Phase 2 will be later in the year. Members were told “keep your eyes on it”. Much of it is European - driven. With big baseload proportionately decreasing, smaller generators are needed to be more responsive. This has been 5 years in the making, yet still the DNOs don't seem to be able to smoothly implement it. The process has not been helped by lack of industry representation.

In the past embedded generators would automatically disconnect if disturbance on system. Now they may need to stay online.

The reuse of older plant is and moving plant around is where things become problematic. There are issues with plant refurbished back to manufacturer standards. (With the exception of like-for-like moves – see below) if a derogation has not been achieved already, it is too late to apply now. G99 applies from 27 April 2019 (unless the generator has a contract for the purchase of main generating plant which was signed before 17 May 2018, and they must have notified the DNO of that by 17 November 2018). If G99 does not apply, then G59 will apply.

Alan had got some wording accepted on like-for-like moves. See slide 6 of his presentation for the wording. The current link to the working group on line is <http://www.energynetworks.org/electricity/engineering/distributed-generation/ena-dno-der-technical-forum.html>

Alan stressed the importance of only using this derogation for the exact purpose it was written for. If people try and flex it, DNOs are likely to become wary and it may be dropped. His proposal had originally only been requested in the context of LFG but it had actually got accepted up to type A & B plant, i.e. up to 10MW per generation unit. GH suggested it may be useful to warn other embedded generators about the potential to undermine the longevity of the derogation by stretching its boundary. **Action: Alan will have a think about how this might be done and get back to GH.**

Alan explained how a generator's G99 form is a living document. If changes are made on site, the form is a technical document that will need to reflect these changes. It had become immediately apparent that with older and refurbished equipment, the DNOs expect a lot of info from the applicants. Much of this won't be available on the engine specification sheet, but the DNOs require additional information and the original equipment manufacturers won't provide it. It is an impossible situation in that the users of this equipment will be required to provide information that they aren't able to procure, unless they commission tests.

Alan is developing a plan to enable industry to collaborate in a form of club, for commissioning testing / modelling work to provide required data, and sharing the results. He will be in a position to put costs on this shortly.

[post meeting note. Alan has sent over [ENA slides from a couple of years ago](#) which are very good at explaining the situation with regard to implementation of G99 and what applies to which power output level etc. He recommends it as a very good presentation.]

Generator connection capacity trading

GH explained that she had sought to have an ENA representative at the LFG meeting to talk about the prospects for generation entry capacity trading. The individual (John Spurgeon) could not attend, but had suggested that two or three generator representatives might like to attend the next meeting on 21st August, where this could be on the agenda.

Alan commented that the pressure on DNOs to claw back on unutilised capacity was only going to grow, and if the industry was not proactive on an alternative approach they would lose the opportunity to benefit.

Action GH to circulate John Spurgeon's message and members could see if there was anyone from their company that could attend.

DSEAR ICoP update

S Shaw talked through the first draft we've seen and explained that while the document had been updated, the current draft has not achieved the objective of simplifying the contents and making the contents more accessible. We are working with the consultants to achieve this, and a copy will be sent to funders ASAP.

Action: GH organise a quick phone call for first reviewers (A Leeding, M Dawber, S Shaw).

Update on the development of intermediate training course

GH read Patrick Pointers message about developing the intermediate course originally developed for Viridor, so that it can be made available to others. There was keenness for this to be done, and for other operators to develop case studies for the month long assessment.

GH to contact Andrew Stokes to check he is happy with this proposal.

There was no update on whether Infinis might open up its training to 3rd parties, but some companies had been liaising with Stewart Wilson following the meeting in Lancaster.

Actions from last meeting

GH went through the actions of the last two meetings. See 6, 7, and 8 from the agenda slide [which you will find on this link](#).

GH explained that she was having trouble getting the LFG LinkedIn site for collaborative action doing what it was required to do. This was collaborated by Mark Dawber who can't get access to it (even though GH has invited him), and so is unable to put Viridor's forthcoming fire sale info up there. Stuart Markham suggested that "Microsoft Teams" which is free could achieve the objectives of the LinkedIn group. **Action: Stuart to send GH info on Microsoft Teams.**

Plans for guest speakers for next meeting

- Steve Shaw suggested Anne Jones, to talk about the closed landfill consultation and plans.

- GH suggested someone to talk about grid entry trading capacity, if the idea is further developed.
 - Andy Leeding suggested Graham Bone the electrical engineer at Infinis
- Post meeting note – if anyone has suggestions, let ghartnell@r-e-a.net know.

Date and location of next meeting

Action: circulate a date in Mid-October. Stuart Markham happy to host at EDL in Milton Keynes.